









EDWARDS'S

BOTANICAL REGISTER:

OR,

ORNAMENTAL FLOWER-GARDEN

AND SHRUBBERY.

LIZARY NEW YORK BOTANICAL GARDEN

CONSISTING OF

COLOURED FIGURES OF PLANTS AND SHRUBS.

CULTIVATED IN BRITISH GARDENS:

ACCOMPANIED BY THEIR

Wistory, Best Method of Treatment in Cultibation, Propagation, &c.

CONTINUED

By JOHN LINDLEY, Ph. D. F.R.S. L.S. AND G.S.

PROFESSOR OF BOTANY IN THE UNIVERSITY OF LONDON. AND THE ROYAL INSTITUTION OF GREAT BRITAIN. 8.c. 8.c. 8.c.

new Series.

VOL. VIII.

OR VOL. XXI, OF THE ENTIRE WORK.

---viret semper---nec fronde caduca Carpitur.

BOTANIOUE

JAMES RIDGWAY AND SONS, PICCADILLY, BELLIANTS



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TO

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*CYCNÓCHES Loddigésii.

Loddiges' Swanwort.

NEW YORK BUTANICAL DARDEN

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Vandeæ, (Introduction to the Natural System of Botany, p. 262.)

CYCNOCHES, Lindl. Perianthium explanatum. Sepala lateralia lanceolata, basi paululum sub labello connata; supremo angustiore. Petala latiora, falcata, decurva. Labellum liberum, ecalcaratum, columna continuum, lanceolatum, integerrimum, ungue abrupto calloso. Columna elongata, arcuata, teres, apice clavata, auriculis 2 falcatis ad latera clinandrii. Anthera bilocularis. Pollinia 2, postice sulcata, subpedicellata; caudicula lineari; glandula grossà.—Habitus Cataseti (sed racemus lateralis). Lindl. Gen. & Sp. Orch. p. 154.

Cycnoches Loddigesii, Lindl. l. c. Bot. Cab. t. 2000.

Caulis erectus, carnosus, cylindraceus, subpedalis, pallidè viridis, corrugatus, basi vaginis membranaceis, apice foliis vestitus. Folia omnind Cataseti cujusdam. Racemus multiflorus, pendulus, e latere caulis erumpens, flexuosus. Flores maximi ordinis, initio inodori, mox Vanillam gratissimè spirantes, præsertim manè. Bracteæ ovatæ; cucullatæ, obiusæ, pedicellis breviores. Sepala viridia apice fusca, et obscure maculata, mox rufescentes; supremum lineari-oblongum, arcuatum 3-pollicare; lateralia 2-poll. longa imá basi connata, ovato-oblonga, subundulata, pendula. coloris cum sepalis, sed minùs conspicuè maculata, oblongo-lanceolata, inequilatera, decurva, 24-poll. longa. Labellum patentissimum, cum columna continuum, angustè oblongum, convexum, carnosum, medio album, apicem versus tenuius, sordide lutescens, undique maculis latis inæqualibus sanguineis notatum; unque brevi alato maculoso, alis lutescentibus, disco convexo albo. Columna gracillima, arcuata, utrinque clavata; dimidio inferiore atropurpureo, superiore complanato virescente purpureo maculoso. Anthera citò decidua, membranacea, bilocularis, ferè pellucida, omninò mutica. Clinandrium posticè bicorne, cornubus falcatis compressis supra antheram incurvis.

For the discovery of this most extraordinary Epiphyte the public is indebted to John Henry Lance, Esq. who discovered it, and a great number of other new plants in the woods

^{*} So called from κύκνος a swan, and αὐχὴν the neck; in allusion to the column of this plant, which is gracefully curved, like the neck of the swan.

of Surinam. It was originally sent by that gentleman to Messrs. Loddiges, with whom it flowered imperfectly three or four years ago. Other and more healthy plants were afterwards presented by Mr. Lance to the Horticultural Society, the produce of one of which was the singular raceme now represented.

In size the flowers of this plant are the largest that have yet been met with among Orchideous plants, measuring not less than five inches from the tip of the back sepal, to the point of the lip. They are more singular than beautiful, but they compensate in fragrance for their want of brilliant colours: the purest odour of Vanilla is exhaled by them when they have been open a short time, especially in the morning.

This species flowers in the months of June and July. It resembles a Catasetum in habit, but its flowers originate from the side, and not the base, of the fleshy stem. It grows very freely under the same management as Catasetums, but seems to require the greatest heat that is ever obtained in a damp stove. It is disposed to increase itself pretty freely, by multiplication of its fleshy stems, and will probably cease, after a few years, to be so rare a plant as it now is.





* CALCEOLÁRIA angustiflóra.

Narrow-flowered Calceolaria.

DIANDRIA MONOGYNIA.

Nat. ord. Scrophularine $\it Juss.$ (Introduction to the Natural System of Botany, p. 228.)

CALCEOLARIA.—Supra, vol. 9. p. 723.

- C. angustiflora; caule perenni diffuso, foliis cordato-ovatis duplicato-serratis glabris oppositis ternatisque, pedunculis axillaribus paucifloris sæpius paniculam angustissimam foliosam efficientibus, corollæ labio inferiore obtuso basi angustato superiore minimo.
- C. angustiflora. Ruiz et Pavon. Fl. Peruv. vol. 1. p. 17. t. 28. f. a. Graham in Bot. Mag. t. 3094.
- ? C. verticillata. Hooker Bot. Misc. vol. 2. 233.

A half hardy perennial, flowering in August and September, and remarkable among its race for its prostrate habit, deep green, somewhat shining leaves, and small flowers. It was found first by the authors of the Flora Peruviana, in the valley of Canta in Peru; subsequently Mr. Cruckshanks discovered it at Culluay in the same district, and gathered the seeds from which the plants in our gardens were obtained.

It is a species of no great attraction, but deserves to be recorded in this work, as one of the genuine wild forms of a genus, which, however beautiful and interesting, has already begun to sink in estimation, in consequence of the ruin that has been brought upon it by the unskilfulness of gardeners. In their haste to improve the works of nature, these gentlemen have converted some of the fairest races in the Vegetable world, into forms in no case more beautiful than the original, and in the majority of instances unhealthy, mongrel, and

debased. We strongly recommend all those who value this really beautiful and most singular genus, to abandon a pursuit which has as yet led to few results of which good taste can approve, and to apply the same skill which they have used in spoiling Calceolarias to recovering the pure original races, to preserving them uncontaminated, and to increasing their native charms; not by unnatural combinations, but by those well known methods by which the purity of a species may be maintained while its vigour, health and beauty are augmented.

At least, if the genus must be the subject of hybridizing, let the intermixture be made with some reasonable attention to the only rules by which it is possible to arrive at a really desirable result.





* INDIGÓFERA atropurpúrea.

Purple-flowered Indigo plant.

DIADELPHIA DECANDRIA.

Nat. ord. Leguminosæ Juss. (Introduction to the Natural System of Botany, p. 86.)

INDIGOFERA.—Supra, vol. 5. fol. 386.

I. atropurpurea; fruticosa, erecta, foliis 5-6-jugis, foliolis oblongis obtusissimis apiculatis tenuibus glabris, racemis multifloris foliis æqualibus v. longioribus, leguminibus linearibus rectis acustriatis 8-9-spermis.

I. atropurpurea Hamilt. in Roxb. Fl. Ind. vol. 3. 380. Wall. Cat. No. 5463.

A native of Nepal, where it was originally found by Hamilton; probably in the hot valleys; for it does not succeed well, unless cultivated in the stove. There it becomes a handsome light green bush, richly ornamented by its numerous bunches of purple and crimson flowers. If planted in the open air, it languishes even on a south wall and in such a season as that of 1834; producing its blossoms in small quantities and imperfectly.

Our specimens were communicated in August, 1833, from the hothouse of James Bateman, Esq. of Knypersley.

Roxburgh says, that when raised in the Botanic Garden at Calcutta, it grew from 3 to 5 feet high in about 8 months.

^{*} Literally Indigo bearer; some species of this genus producing the dye of that name.







* TRÍTOMA Burchéllii.

Burchell's Tritoma.

HEXANDRIA MONOGYNIA.

Nat. ord. Asphodelex Juss. (Introduction to the Natural System of Botany, p. 273.)

TRITOMA Ker. Link. Perianthium tubulosum, eplicatum; limbo brevi 6-dentato regulari. Stamina hypogyna, recta, libera, exserta, alterna longiora. Stigma simplex. Capsula cartilaginea, rigescens, ovata, obtuse trigona. Semina biserialia, plurima, triquetra v. angulata, sibi invicem appressa.—Folia graminea canaliculata. Caulis nullus.

T. Burchellii; foliis lætè viridibus margine lævibus, racemo oblongo crasso denso, perianthiis clavato-cylindraceis unicoloribus.

Tritoma Burchellii. Herbert. in Sweet's Hort. Brit.

Racemus 4 poll. longus, densissimus, et vix angustior, nullo modo pyramidatus v. protractus. Flores juniores sanguinei, posteà lutei v. potius luteo-aurantiaci unicolores, 1\frac{1}{4}-poll. longi; limbo 4 lin. tubo apice 3 lin. lato.

Communicated by the Honourable and Rev. William Herbert in July last. It was originally introduced from the Cape of Good Hope by Mr. Burchell, after whom it has been named.

It is a beautiful perennial plant, and quite hardy. At Spofforth it always flowers before or soon after Midsummer; all the other species of Tritoma are late flowerers.

Increased by the offsets, which it throws up in plenty.

^{*} So named from τρεις three, and τεμνω to cut, because of the leaves ending in three sharp angles. As there was a genus of insects already called Tritoma, when this genus of plants was first proposed, Professor Link would change its name to Tritomanthe; but there is no end to alterations of this sort.







Her t ale

Tuagway by cocad & Mars 1 1835.

* ZEPHYRÁNTHES Spofforthiána.

Spofforth Zephyranthes.

HEXANDRIA MONOGYNIA.

Nat. ord. Amaryllidex, R. Br. (Introduction to the Natural System of Botany, p. 259.)

GARDEN VARIETY.

ZEPHYRANTHES SPOFFORTHIANA. Herbert MSS.

"Scape yellowish green, $5\frac{3}{4}$ inches high. Spathe brownish green. Peduncles green, an inch long. Germ deep green. Tube green. Limb rose-coloured, lined with white in the form of a star. Style very much declined, white and much longer than the filaments. Leaves not $\frac{1}{4}$ of an inch wide, acute, keeled, deep green. Pollen abundant, and anthers quite perfect and apparently fertile."

"The pretty flower which is the subject of this article, is an hybrid production from the tropical Z. tubispatha, which has white flowers, fertilized by the pollen of the Mexican Z. carinata with large red flowers. It is in every respect intermediate, having the leaves wider than those of Z. tubispatha, and distinguishable by the keel, which is conspicuous on the back of those of the male parent. The flower is also of intermediate dimensions and colour, resembling the male parent most both in form and hue, and in the posture of the

^{*} See folio 1361,

style and filaments. A single bulb of this intermixture was obtained at Spofforth, which has produced a few offsets, piercing the ground, like those of the male parent, at a little distance from the principal bulb, their lateral direction giving the plant a stoloniferous appearance. Its anthers are perfectly formed, and the pollen seems to have all the requisites for fertility. Standing in a cool part of the stove, beside Z. tubispatha, it flowers before it, and probably will succeed like Z. carinata in a lower temperature. It must be observed that Z. carinata, Bot. Mag. the male parent of this plant, is, with respect to the flower only, the plant represented in the Bot. Reg. 902. under the name of Z. grandiflora, though the flower in the figure is rather longer and paler than its usual habit; but in consequence of the flower having been produced by a a newly imported bulb, before the leaves had shot, and a subsequent mistake of the gardeners, the sketch of the leaves, and the description of the leaves and seeds of Z. grandiflora were made erroneously from a pinkish variety of the small flowering Z. striata.

"It will have been observed that Habranthus phycelloides of this work approaches so near in its general aspect to the genus Phycella, as to make it questionable whether the genus Phycella should be maintained distinct from Habranthus, at least from the many-flowered, non-expanding portion of that genus; and that the one-flowered Habranthi, which expand in the sun, are not easily distinguishable from the genus Zephyranthes; and it may be found that such species, viz. H. versicolor, robustus, and Andersoni, should be removed to the genus Zephyranthes; but an accurate revision of the various species should precede any alteration. It has, however, been as yet found impossible to obtain a mule between any Habranthus and Zephyranthes, which gives some reason to believe that the division as it stands is correct. Several flowers of Z. striata at Spofforth have lately been fertilized by Z. carinata, and others in the same pots by H. Andersoni, all the former appear to be forming seed, and all the latter have died away.

For the foregoing interesting memorandum we are indebted to the Honourable and Rev. William Herbert. We have for some time been aware of the error to which he alludes, and are happy to have the present opportunity of making it known. It will be necessary to expunge the name of Z. grandiflora from the catalogues, as it is a non-entity.







3 Waits.

* GARDOQUÍA Hookéri.

Scarlet Gardoquia.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. Labiatæ, Juss. (Introduction to the Natural System of Botany, p. 239.)

GARDOQUIA Fl. Per. Calyx tubulosus, 13-nervius, subincurvus, ore æquali vel obliquo, dentibus brevibus rectis subæqualibus vel subbilabiatis. Corollæ tubus longè exsertus, rectus vel incurvus, intùs nudus; limbus bilabiatus, labium superius erectum subplanum emarginatum, inferius subpatens, lobis planis medio latiore. Stamina 4, subdidynama, inferioribus longioribus, laxè adscendentia, apice subdistantia, superiora subinde sterilia. Filamenta edentula. Antheræ biloculares, loculis distinctis parallelis vel subdivergentibus. Styli lobi subæquales. Achenia sicca, lævia.—Suffrutices fruticesve ramosissimi, foliosi, sæpe procumbentes. Flores pulchri, sæpiùs coccinei. Bentham Gen. et Sp. Lab. p. 397.

G. Hookeri; fruticosa, glaberrima, foliis obovatis subintegerrimis basi in petiolum brevem angustatis utrinque viridibus, pedunculis 2-3-floris, calycis glabri subbilabiati labio superiore breve bidentato erecto, fauce intùs villis clausâ. Bentham l. c. 401.

Cunila coccinea, Nutt. ex Hooker exot. fl. 3. t. 163.

Melissa coccinea, Spreng. syst. 2. 224.

Gardoquia Hookeri, Don in Sweet. Fl. Gard. ser. 2. t. 271.

A very pretty half hardy and half shrubby plant, native of Florida according to Nuttall, as quoted by Dr. Hooker, and of South Carolina according to Mr. Don.

Our specimens were furnished by Mr. Marshall, gardener to Mrs. Langley of Thames Ditton, in Oct. 1834. It is a neat, and very desirable plant, easily propagated by cuttings.

^{*} Don Diego Gardoqui, Minister of Finance under Charles IV. of Spain, received the compliment of having this beautiful genus named after him, because of his having favoured the South American Expedition of Ruiz and Pavon.







* VERBÉNA sulphúrea.

Sulphur-coloured Vervain.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Verbenace. Juss. (Introduction to the Natural System of Botany, p. 238.)

VERBENA.—Supra, vol. 4. fol. 294.

V. sulphurea; diffusa, pilosa, foliis 3-5-partitis: laciniis simplicibus lobatisque linearibus obtusis inferioribus ab imâ basi provenientibus, floribus subcapitatis, calycibus hispide pilosis, corollæ laciniis patentibus emarginatis.

V. sulphurea. Don in Sweet's Flower Garden, ser. 2. t. 221.

A pretty hardy perennial, with hairy stems spreading flat upon the ground, and heads of sulphur-coloured flowers.

Although not so conspicuous for its beauty as Verbena chamædrifolia (V. Melindres of this work, t. 1184.) it is nevertheless a neat pretty species, which deserves a place in all select collections.

It is a native of Chile, flowering in August, September, and November. Cuming found it near Valparaiso (No. 519); Bridges on the mountains near the same city. It is very nearly the same as V. erinoides, from which it differs in having yellow instead of purple flowers, and more particularly in the lower lobes of its leaves originating from the very base of the leaf, and not from near the point.

^{*} See fol. 1184.











* DRACÆNA terminális.

The Sandwich Island Tee-Plant.

HEXANDRIA MONOGYNIA.

Nat. ord. Asphodelee, Juss. (Introduction to the Natural System of Botany, p. 271.)

DRACÆNA.—Supra, vol. 12. fol. 956.

D. terminalis; caule fruticoso vel arborescente, foliis petiolatis lanceolatis utrinque attenuatis, paniculæ ramis divaricatis simplicibus ramosisve floribus subsessilibus. Römer & Schultes, Sp. Pl. 7. 343.

D. terminalis. Willd. Sp. Pl. 2. 157.

Asparagus terminalis. Linn. Sp. Pl. 450.

One of the most graceful of arborescent stove-plants, where there is sufficient height for it to rear its slender stem to the elevation of ten or twelve feet. In appearance it resembles a Palm, and although, when its structure is carefully examined, it is found not to be one of that princely tribe, yet there can be no doubt that it serves to connect the chain of vegetation, by bringing the Asparagus in contact with the Cabbage Palm. Linnæus took it for a species of Asparagus.

In place of again describing a plant which has repeatedly been already in the hands of Botanists, we shall confine ourselves on this occasion to an extract from the entertaining work of Ellis on the Sandwich Islands.

"The Ti plant is common in all the South Sea Islands. It is a slow-growing plant, with a large, woody, fusiform

^{*} See folio 1169.

root, which, when first dug out of the ground, is hard and fibrous, almost tasteless, and of a white or light yellow colour. The natives bake it in large ovens underground, in the same manner as they dress the arum and other roots. After baking it appears like a different substance altogether, being of a yellowish brown colour, soft, though fibrous, and saturated with a highly saccharine juice. It is sweet and pleasant to the taste, and much of it is eaten in this state, but the greater part is employed in making an intoxicating liquor much used by the natives. They bruise the baked roots with a stone, and steep them with water in a barrel, or the bottom of an old canoe, till the mass is in a state of fermentation. The liquor is then drawn off, and sometimes distilled, when it produces a strong spirit; but the greater part of it is drank in its fermented state without any further preparation. The root is certainly capable of being used for many valuable purposes. A good beer may be made from it; and in the Society Islands, though never able to granulate it, we have frequently boiled its juice to a thick syrup, and used it as a substitute for sugar when destitute of that article.

"We should think it an excellent antiscorbutic, and as such useful to ships in long voyages. Captains visiting the Society Islands frequently procure large quantities of it to make beer with during their voyage, as it will keep good six weeks or two months after it is baked. On my return in the American ship Russell, Captain Coleman, we procured a quantity that had been baked at Rurutu, near the Society Islands, and brought it round Cape Horn. It lasted five or six weeks, and would probably have kept longer, as the only change we perceived during that time was a slight degree of acidity in the taste. Cattle, sheep, and goats are fond of the leaves; and as they contain more nutriment than any other indigenous vegetable, and may be kept on board ships several weeks, they are certainly the best provender that can be procured in the Islands for stock taken to sea. It is not so plentiful in the Sandwich Islands as it was before the natives used it for the above purpose, but in some of the

other Islands of the Pacific it is abundant, and may be easily procured.

"Other parts of the dracæna are also useful. The natives frequently plant the roots thickly around their enclosures, interweave the stems of the plant, and form a valuable permanent hedge. The branch was always an emblem of peace, and in times of war, borne, together with a young plantain tree, as a flag of truce, by the messengers who passed between the hostile parties. The leaves, wove together by their stalks, formed a short cloak, which the natives wore in their mountainous journeys; they also make the most durable thatch for the sides and roofs of their best houses, are employed in constructing their tents in war, and their temporary abodes during their inland excursions."

The specimen from which our drawing was taken was furnished by Mr. Lambert, in March 1834.

It is propagated either by seeds or by truncheons of its stem, which when cut down will throw up suckers from its base, just as the Asparagus, when its early shoots are destroyed in the spring, will continue to replace them by fresh bourgeons from its bottom.







is Drake del.

Put by S. Ridoway 169 Fixadilly Ap. 1. 1895.

- A atte

* BÉRBERIS dealbáta.

Whitened Barberry.

HEXANDRIA MONOGYNIA.

Nat. ord. Berberideze, Juss. (Introduction to the Natural System of Botany, p. 30.)

BERBERIS.—Supra, vol. 12. fol. 1176.

§ Folia simplicia, sempervirentia (coriacea). Flores racemosi.

B. dealbata; subinermis, foliis simplicibus coriaceis suborbiculatis spinoso-dentatis subtus dealbatis, racemis oblongis densissimis pedunculatis.

Frutex in horto 4-5-pedalis, verosimiliter orgyalis ad minimum, ramis purpureo-fuscis inermibus parcè foliatis. Folia coriacea, subrotundo ovata, convexa, glaucescentia, spinoso-dentata, aliquandò subquadrata, imò cuneata 3-dentata, subtus albedine densá corticata; petiolis brevibus basi articulatis. Flores in racemos oblongos multifloros densissimos nutantes congesti, lutei; sepalis apice sanguinolentis. Petala intus biglandulosa.

A native of Mexico whence it was obtained by the Horticultural Society. Our drawing was made in the Chiswick Garden in April last.

This remarkable species is an evergreen shrub, which is probably hardy; but of this we are not certain, in consequence of its having been always hitherto protected in front of an east wall in winter. It differs in a striking manner from all other Barberries in several particulars. In the first place its leaves are very round and convex, and covered with a sort of bloom; then they are very white on the under surface, not however from the presence of any mealiness or white hairs, but on account of a discoloration of the

^{*} See folio 1176.

cuticle; besides this there are scarcely any spines upon the branches; and finally its flowers are collected in remarkably dense nodding clusters, which are not much longer than the leaves. Its fruit is unknown.

Like the other species of its genus it is most conveniently increased by layers, which will root in the course of a single season.





* LÆLIA ánceps.

Two-edged Lælia.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Epidendreæ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

LÆLIA, Lindl. Sepala explanata, lanccolata, æqualia. Petala majora paulò difformia. Labellum (posticum), 3-partitum, lamellatum, circa columnam convolutum. Columna aptera carnosa, anticè canaliculata. Anthera 8-locularis. Pollinia 8, caudiculis 4 clasticis.—Herbæ epiphytæ, rhizomate pseudobolbophoro. Scapi terminales, pauci v. multiflori. Flores speciosi, odorati. Gen. & Sp. Orch. p. 115.

L. anceps; foliis binis aut solitariis lanceolatis, scapo ancipiti bifloro squamis carinatis vestito, ovario viscoso, labelli disco lineari elevato apice trilobo, pseudobolbis ovatis distantibus tetraquetris.

Rhizoma repens, squamosum. Pseudobulbi ovati, distantes, tetraquetri, 2 poll. longi, juventute squamis acuminatis vestiti. Folia solitaria, rarò bina, lanceolata, acuminata, coriacea, atroviridia. Scapus ex apice pseudobulbi ortum ducens, sesquipedalis, gracilis, anceps, squamis carinatis arctè vaginantibus vestitus, apice biflorus. Ovarium viscosum, bractea lato-lanceolata, acuminatissima, carinata, membranacea, fusca, involvente brevius, apice teres, cuniculo a basi labelli orto brevi instructum. Sepala violacea, membranacea, dorso subherbacea, lanceolata, bipollicaria, patentissima. Petala oblongo-lanceolata, ejusdem coloris texturæ, et longitudinis, sed lined medid dorsi tantum herbacea, et duplò latiora. Labellum aut anticum, aut posticum, cucullatum, trilobum, basi columnam involvens et pallidè violaceum, intus luteum sanguineo-venosum; trilobum, lobis lateralibus rotundatis, intermedio atropurpureo basi albo, ob<mark>longo, acu</mark>to, subundulato, plano, lineá latá elevatá crassá luteá antrorsum trilobá in medio; lobis luteralibus abruptis, intermedio productiore in laminam abruptam verticalem attenuato. Columna semiteres, marginata, clavata, cum labello continua. Anthera 8locularis. Pollinia 8, cuneata, utráque extremitate caudicularum quatuor inserta et inflexa.

A very beautiful Orchideous plant, imported from Mexico by Messrs. Loddiges, in whose collection our drawing was made last December. We at first took it for *Lælia gran*diflora, but Mr. George Loddiges has satisfied us that it is not that species, which it is, however, highly probable that he possesses in a plant from Xalapa, with pear-shaped pseudo-bulbs, each of which has two or three lanceolate purplish leaves. The pseudo-bulbs of this are remarkable for their ovate outline, and for their four-angled figure, produced by a sharp ridge being planted upon each face of a compressed body.

When we say that this plant is equal in beauty to any of the Cattleyas, that it has a far more graceful mode of growth, in consequence of the length of its slender scaly stems, from the point of which the flowers swing, and that it diffuses an agreeable fragrance, we shall have said that it is one of the most interesting of the tribe that has yet made its appearance in our stoves.

It will probably succeed, without difficulty, in any hothouse which is adapted for the cultivation of Maxillarias and plants of that description.





* MONACHÁNT HUS víridis.

Green-flowered Cowlwort.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Vandeæ, Juss. (Introduction to the Natural System of Botany, p. 262.)

MONACHANTHUS.—Supra, vol. 20. fol. 1735.

M. viridis; racemo multifloro, labello oblongo cuspidato margine lævi, sepalis petalisque rigidis ovatis.

M. viridis, Lindl. Gen. & Sp. Orch. p. 157.

Planta facie omnino Catascti tridentati quo foliis et caule tantum convenit ut floribus ademptis eandem diceres. Flores carnosi, herbacei, labelli margine vitellino. Sepala ovata, acuta, rigida, petalis parallela. Petala conformia, sed latiora et maculis quibusdam purpureis obscuris notata. Labellum posticum ventricosum, carnosum, 1½-poll. longum, ore obliquo lævi cuspidato. Columna brevis, ovata, carnosa, mutica.

This is the original species on which the genus Monachanthus was founded. In habit it is so like Catasetum tridentatum that we long doubted whether it ought to be generically separated. The absence of the long tendril-like processes, which are so conspicuous upon the column of Catasetum, was, however, so remarkable a circumstance, that we came to the conclusion that it must be an essentially distinct form; and the discovery of the curious Monachanthus discolor, figured at tab. 1735, has shewn that we judged correctly.

A native of Brazil, growing upon trees in the Corcovado, whence Dr. Hooker received the drawing and specimen which first made the genus known. Our figure was made from a specimen communicated last November from Went-

^{*} See fol. 1735.

worth, by permission of Lord Fitzwilliam. We are not aware at what time, or by whom it was imported, but it has probably been taken for a green form of the common Catasetum tridentatum, and consequently no record has been kept of it.

It requires precisely the same treatment as *Catasetums*, and may be cultivated with facility by any one who has a damp stove.





* ARBUTUS procéra.

Tall Arbutus, or Strawberry Tree.

DECANDRIA MONOGYNIA.

Nat. ord. Ericaceæ, Juss. (Introduction to the Natural System of Botany, p. 182.)

ARBUTUS.—Supra, vol. 2. fol. 113.

A. procera; foliis oblongis serratis serrulatis integrisque glabris, petiolis calvis, racemis terminalibus paniculatis secundis.

A. procera, Douglas Herb.

Rami juvenes glaucescentes, adulti rufo-castanei, glabri, salvis vegetissimis qui hispidi sunt; epidermide firmă non deglubente. Folia în ramis surculosis oblonga, utrinque angustata, duplicato-serrata, petiolis hispidis; ramulorum oblonga, nunc cordata, integra vel irregulariter serrulata; petiolis ferè unciam longis. Racemi tomentosi, paniculati, terminales, secundi; bracteis ovatis, concavis, glabris. Corollæ albæ, leviter herbaceæ, ovatæ, medio paululum constrictæ, basi obtusæ et obscurè decem-gibbosæ; limbo revoluto. Fructus juniores subrotundi, leviter obovati, tuberculati more Unedonis.

A small tree found by the late unfortunate Douglas in the mountainous woody parts of the North West Coast of North America, and introduced by the Horticultural Society in 1825.

In the Gardens it forms an evergreen bush, with a fine broad glossy foliage, and a very vigorous appearance; but

^{*} The Arbutus of Virgil and Horace was undoubtedly the modern Strawberry Tree. De Théis says the word has been formed from the Celtic ar rough, and boise a bush, in consequence of the astringency of its fruit. He considers that the term horrida, applied by Virgil to his Arbutus, has equally, in this case, the signification of austere.

it requires to be carefully protected from extreme cold in winter, and succeeds best against a west wall. Its flowers are of a delicate greenish white, and are arranged after the manner of those of Arbutus Andrachne, to which species it is most nearly allied; differing however altogether in the form and serratures of its leaves, and in the form and size of its flowers.

The unripe fruits appear from our dried specimens to be like those of the common Arbutus, only obovate in a slight degree; the ripe fruit is unknown. The strong root-shoots are covered with scattered bristles, as also are the leaf-stalks, and the leaves themselves on such shoots are very strongly serrated.

Our drawing was made from a specimen obligingly supplied in May last, by Mr. Osborn, the present proprietor of the celebrated Fulham Nursery, lately occupied by Messrs. Whitley and Co.





* BRÁSSIA Lanceána.

Mr. Lance's Brassia.

GYNANDRIA MONANDRIA.

Nat. ord. Orchider § Vander, Lindl. (Introduction to the Natural System of Botany, p. 262.)

BRASSIA.—Supra, vol. 10. fol. 832.

B. Lanceana; sepalis ovato-lanceolatis acuminatis, petalis minoribus, labello oblongo acuminato undulato sepalis lateralibus duplò breviore.

Color totius herbæ amænè et diffuso viridis. Pseudobulbi densi, oblongi, macri, compressissimi, ancipites, longitudinaliter sulcati, haud rarò arcuati. Folia bina aut solitaria, oblongo-lanceolata, macra, valdè striata. Racemi radicales, foliis longiores, floribus magnis luteis secundis odorem Primulæ suavissimum spirantibus onusti. Bracteæ ovatæ, concavæ, breves, membranaceæ. Sepala patentissima, lineari-lanceolata, purpureo paululum maculata, basi virescentia; supremum 1½, lateralia 2 poll. longa. Petala ejusdem formæ et coloris sed sepalo supremo duplo minora. Labellum luteum, immaculatum, oblongum, undulatum, ferè repandum, acuminatum, sepalis lateralibus duplò brevius; basi tuberculis 2 albis oblongis contiguis parallelis inanibus pubescentibus, dentibusque totidem membranaceis in fronte.

A native of Surinam, in woods, where it was found growing upon trees by John Henry Lance, Esq.; and by him presented to the Horticultural Society in 1833. It is also wild in Brazil, where it was found by Dr. von Martius upon the trees on the banks of the river Jui, one of the tributaries

^{*} Thus named by Mr. Brown in due commemoration of the late Mr. Brass, a skilful botanical traveller and draughtsman, who collected seeds, plants, and dried specimens on the Guinea Coast for Sir Joseph Banks, Dr. Fothergill and Dr. Pitcairn, and whose sketches being most liberally lent by Sir Joseph Banks to Dr. Afzelius in his visit to Sierra Leone, were maliciously damaged, and partly destroyed out of characteristic and wanton brutality by some piratical slave-mongers under the French flag, during the late war.—Smith in Rees' Cyclopædia.

of the Japurà in the Province of Rio Negro, flowering in February. It blossomed at nearly the same time in the Chiswick Garden, and with Messrs. Loddiges, in whose collection our drawing was made last August.

It is of course, like other Surinam plants, a very tender species, and requires the hottest and dampest part of a stove; but there is no Orchideous plant which is more easy to cultivate, or more ready to multiply. It thrives in decayed leaf-mould, better than in any other compost, and may be readily known when out of flower, by the bright light green colour of its leaves, and by its peculiarly thin pseudobulbs, which often curve down upon themselves, as is represented in our figure.

If this is not equal to *Lælia* in the size of its flowers, and the brilliancy of its colours, it far surpasses that plant in its exquisite fragrance, which is like nothing so much as newly gathered cowslips and primroses.





Miss Drake dei

Fit by I Gudgeray 169 Recadelly Sty. 1. 1835.

* RHODOCHÍTON volúbile.

Twining Red-Cloak.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Scrophularineæ, Juss. § Antirrhineæ (Introduction to the Natural System of Botany, p. 273.)

RHODOCHITON Zuccarini. Calyx membranaceus, coloratus, campanulatus, 5-fidus. Corolla: tubus anguloso-clavatus, internè pilis simplicibus reflexis, basi ubique, faucem versus 5-fariam vestitus; limbus 5-partitus, segmenta subæqualia erecta. Stamina didynama, rudimento quinti, erecta, apicibus simplicibus. Stylus sub stigmate rectus Graham in Bot. Mag. t. 3367. (Capsula vestita, pergamenea, bilocularis, polysperma, irregulariter dehiscens. Semina alata, radiatim striata; ex Zuccarini.)

Rhodochiton volubile; Zuccarini in litt. 1829, Otto et Dietr. in verhandl. ver. gart. Preuss. 10. 152. t. 1. Graham l. c.

Lophospermum atrosanguineum. Zuccarini Plant. nov. et min. cogn. fasc. 1. in Abhandl. Math. Phys. Cl. Monac. vol. 1. p. 306. t. 13.

Lophospermum Rhodochiton. D. Don in Sweet's Brit. Fl. Gard. t. 250.

A beautiful little climbing herbaceous plant, which was introduced late in 1833, by Mr. Low of Clapton, from the Berlin Garden. It is not very usual for us to be behindhand with our contemporaries in the publication of new plants, which are of much Horticultural interest; but on the present occasion we find ourselves forestalled in every direction. We console ourselves with the reflection that we are on that very account enabled to give a more complete history of the plant than would have been possible at an earlier period.

It was originally raised in the Botanic Garden at Munich from seeds collected in Mexico by Count Karwinski, and in the year 1829 was distributed to other gardens under the name of *Rhodochiton volubile*, an appellation which had been given it by Professor Zuccarini.

An account of it was soon after published in the Transactions of the Prussian Horticultural Society, by Messrs. Otto and Dietrich, with a tolerable figure, and the following account of the manner in which it had been treated in the Berlin Garden.

^{*} From ροδος red, and χιτων a cloak, in allusion to the colour of its calyx.

"It is a climber, and may be applied to cover the walls in conservatories, as well as in the open ground during summer. It presents a really surprising aspect, when the outer walls of a greenhouse are covered with a screen formed by its numerous branches, tinged with red, and loaded with the most beautiful purplish-black flowers hanging down from the red calyxes. Out of every axil, to the most remote part of the twigs, a flower takes its origin, hanging down from a long stalk, which like the underside of the leaves and branches is coloured There can be no doubt, that it is, of all the known climbing plants with which we cover walls during summer, the most remarkable and beautiful, and ought to be particularly recommended, as it is easily cultivated, and flowers so very freely. Its propagation is by seeds and cuttings. The seeds are sown in March and April, that the young plants may become strong enough in time for planting in the open ground, where they remain during the whole summer, until frost sets in; if these plants are to be preserved, they should be potted off and put in a conservatory, where they prosper in a temperature, from 43° to 48° Fahr. They are also easily propagated by

This mode of management appears to have been attended with great success, for when the plant was observed in the Berlin Garden in the autumn of 1833 by Dr. Henderson, it was in a much more

thriving state than we have seen it in England.

Its next appearance in print was in the Transactions of the Mathematical and Physical Class (we believe) of the Munich Academy of Sciences, where it was published with an admirable description and figure by Professor Zuccarini; who, however, had altered his opinion of its belonging to a distinct genus, and called it *Lophospermum atrosanguineum*; this must have been in 1833, but our copy of the memoir

to which we refer, bears no date.

Then Mr. Don, in August 1834, published it under the name of Lophospermum Rhodochiton, and he was followed in the succeeding December by Professor Graham, who adhered to Professor Zuccarini's first opinion, that the plant is distinct from Lophospermum, in which we entirely agree. In such groups as the Antirrhineous section of Scrophularineæ, less weighty reasons than the great coloured campanulate calyx, and salver-shaped corolla of Rhodochiton, as compared with the five-parted herbaceous calyx, and funnel-shaped corolla of Lophospermum are universally admitted as sufficient to justify the separation of such genera as Antirrhinum, Linaria and Anarrhinum, and we cannot conceive upon what principle the former are to be combined while the latter remain disunited.

In this country the *Rhodochiton* appears to require exactly the same treatment as *Lophospermum*; we saw it in great beauty at Mrs. Marryat's in a pot in the greenhouse last September, and it grew very well in the Garden of the Horticultural Society, trained to a pole in the open ground. Its greatest enemy seems to be bright sunlight.





* DENDRÓBIUM Pierárdi.

Mr. Pierard's Dendrobium,

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Malaxideæ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

DENDROBIUM.—Supra, vol. 7. fol. 548.

D. Pierardi; caulibus pendulis glabris, foliis ovato-lanceolatis acutis, floribus geminatis racemum spurium formantibus, sepalis acuminatis membranaceis, petalis sepalo supremo majoribus acuminatis, labello cucullato dilatato subtruncato pubescente ciliato. Gen. et Sp. Orch. p. 79.

D. Pierardi. Roxb. Fl. Ind. 3, 482. Hooker Exot. Fl. t. 9.

Many years since an Orchideous Epiphyte was sent from Chittagong with some other species to the Botanical Garden, Calcutta, when Dr. Roxburgh named one of them *Dendrobium Pierardi*, in compliment to the gentleman who discovered it. In his Flora Indica Dr. Roxburgh adds that it is also a native of various parts of the Delta of the Ganges, where it is generally found on Mangoe Trees.

No one has however been able to discover any plant which answers exactly to Dr. Roxburgh's description of his D. Picrardi; and what is now cultivated under that name in the Calcutta Garden appears from Dr. Wallich's specimens to be the plant defined by Dr. Brown in the seventh volume of the first series of this work under the name of D. cucullatum.

When the first part of the Genera and Species of Orchideous Plants was published, we had satisfied ourselves that in all probability Dr. Roxburgh had confounded two or three different species under the common name of D. Pierardi; and accordingly we took the species represented by Dr. Hooker in his Exotic Flora, as the authority for the name, and we considered Dr. Brown's Dendrobium cucullatum, to be a mere form of it.

We have since had an opportunity of comparing D. Pierardi and cucullatum side by side, in the utmost perfection in the stove of the Messrs. Loddiges, where these lovely species flowered in great splendour in January last, forming festoons two or three feet long, quite covered with the most delicate pink and yellow blossoms. At first sight they are so entirely the same that one does not immediately perceive in what their differences consist; but upon a more attentive inspection it is found that D. cucullatum has larger flowers, with a broad roundish-ovate lip, the base of which is rolled up into a sort of short stalk, while in D. Pierardi the lip is rounded and very blunt, and its base is rolled into a much longer stalk, which quite conceals the column; it is moreover remarkably incurved. These

^{*} See folio 1239.

differences are expressed at the bottom of the accompanying plate, where fig. 1. represents D. Pierardi, and fig. 2. D. cucullatum. Whether or not the latter is really a distinct species may possibly be doubted; but it is certainly so remarkable a form, as to have amply justified Dr. Brown in separating it from Pierardi.

Allied to these plants are some new species, which we avail ourselves of the present opportunity of making known to Botanists.

 D. ochreatum (Lindl. in Wall. Cat. no. 7410); caulibus brevibus e squamis membranaccis ventricosis erumpentibus, foliis ovato-lanceolatis acutis, vaginis ventricosis, floribus geminatis sepalis petalisque majoribus lanceolatis acuminatis, labello rhomboideo-ovato unguiculato cucullato intùs tomentoso.

Hab. in Chittagong, Wallich (hab. s. sp. e Museo Anglo-Indico).

Species vaginis laxis, alioquin facie D. Pierardi, primo intuitu distinguenda. Flores expansi ferè 3 uncias lati, pallidi. Labellum purpureo-maculatum; ungue intùs supra medium calloso.

A beautiful plant.

2. D. Cunninghamii; caulibus gracilibus pendulis ramosis vaginis foliorum corneis transversim corrugatis squamatis, foliis ovato-linearibus obtusiusculis, pedunculis oppositifoliis bifloris foliis multò brevioribus, sepalis ovatis acutis, petalis oblongis acutis latioribus, labelli trilobi lobo intermedio subrotundo undulato basi 5-lamellato lateralibus nanis acutis.

Hab. supra truncos Callistemonis elliptici (A. C.) in insula septentrionali Novæ Zelandiæ, juxta mare, incolis Raumangha; R. Cunningham (hab. s. sp.

comm. cel. A. Cunningham).

This species is nearly allied to *D. biflorum*, of which I had examined no specimens at the time the *Gen. et Sp. Orch*, was published. Having since received that plant in a good state from Mr. Mathews, who found it in Otaheite hanging from the branches of trees, I am enabled to offer a correct definition of that very rare plant.

- D. biflorum Swartz; caule pendulo gracili tereti, foliis lineari-lanceolatis acuminatis planis, pedunculis bifloris lateralibus e paleis corneis erumpentibus, sepalis petalisque acuminatissimis, labello rhomboideo medio bilamellato trilobo lobis lateralibus acutis nanis intermedio deltoideo acuminato margine fimbriato.
- 3. D. Grußithianum; caulibus erectis elongatis clavatis sursum tetragonis apice diphyllis, foliis lanceolato-oblongis obtusis, racemis laxis flexuosis multifloris pendulis e latere caulium natis, bracteis oblongis membranaceis pedicellis 4-plò brevioribus, petalis oblongis ciliolatis sepalis duplò latioribus, labello ovato pubescente denticulato subrepando, capsulis pyriformibus angulatis.

Hab. in Regno Burmano supra arbores, W. Griffith. (hab. s. sp. comm. cel.

Griffith.

A beautiful species with much the appearance of D. aggregatum.

4. D. extinctorium; pseudobulbis depressis orbiculatis aggregatis, foliis, pedunculis terminalibus unifloris, sepalis lateralibus posticis basi longè in extinctorii forma productis, labelli ungue longissimo tenui, limbo trilobo: lobis lateralibus erectis acutis intermedio oblongo rotundato, capsula pyriformi angulata.

Hab. in Regno Burmano locis humidis supra truncos Careyæ arboreæ, W.

Griffith (hab. s. sp. comm. cel. Griffith.)

This is next D. pusillum Blume, and has very much the appearance of a Bolbophyllum. Its leaves have not been seen.





* BEGÓNIA petalódes.

Petaled Begonia.

MONŒCIA POLYANDRIA.

Nat. ord. Begoniaceæ, Juss. (Introduction to the Natural System of Botany, p. 169.)

BEGONIA.—Supra, vol. 4. fol. 284.

B. petalodes; caulescens, foliis æquilateris orbiculatis 5-9-lobis incisis serratis cucullatis, floribus masculis disepalis dipetalis, fœmineis tetrasepalis tetrapetalis, fructus alis subæqualibus acuminatis, cymis 2-3 floris.

Stipulæ ovatæ, serratæ. Foliorum lamina petiolo brevior. Cymæ longè pedunculatæ 2-3-floræ. Flores masculi sepalis 2 subrotundis roseis, petalis 2 conformibus sed minoribus albis. Flores fæminei sepalis 4, parvis, subrotundis roseis, petalis totidem conformibus albis quorum 2 minora sunt. Alæ fructus immaturi æquales, acuminatæ.

A pretty little species sent us by Mr. Richard Harrison, in April 1833, and we presume a native of Brazil. It adds another to the beautiful genus Begonia, which cultivators scarcely appreciate in this country. The species are all so very easily cultivated, and have so neat an appearance that they are exceedingly well adapted for ornamenting a damp stove. One of the prettiest things in the gardens of Schönbrunn is a Begonia house, filled with this genus and Ferns growing upon decayed wood and old tan.

To Botanists this is peculiarly instructive, because it shews better than any species we have previously seen what the regular form of the genus may be considered. To us it

is the more interesting, because its petals, distinct from the sepals, shew we were right in considering the tendency of Begonia to be towards the production of a corolla, and that it is consequently correctly associated in the Nixus plantarum with Polypetalous orders; and secondly, that two or four being the number of the floral envelopes, when distinctly formed, the relationship of Begoniaceæ to Onagrariæ is almost demonstrated.





* ONCÍDIUM citrínum.

Lemon-coloured Oncidium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchider § Vander, Lindl. (Introduction to the Natural System of Botany, p. 262.)

ONCIDIUM.—Supra, vol. 13. fol. 1050.

O. citrinum; pseudobulbis oblongis compressis, foliis ensiformibus rigidis scapo simplici brevioribus, sepalis petalisque labelli longitudine lineari-oblongis undulatis, labello cordato utrinque introrsum arcuato apice dilatato subreniformi, crista 8-tuberculata pubescente, alis minimis, stigmate orbiculari.

Planta O. altissimo (fol. 1651.) valdè affinis et fortè mera varietas. Diversa tamen videtur scapo non ramoso, floribus parum maculatis, sepalis petalisque minùs acuminatis, cristà tuberculatà potius quam digitatà, demum alis minimis, et stigmate orbiculari nec angusto compressoque.

A native of Trinidad, whence it was introduced by Messrs. Loddiges, in whose collection our drawing was made last November. Unfortunately the plant soon after sickened and died; so that it is for the present lost to the country.

It approaches very nearly to O. altissimum, figured at fol. 1651 of this work; and is principally distinguished by the following characters. Its flowering stem is simple and not branched; its flowers are of a pale lemon colour, very distant from each other, and by no means so much spotted; the crest of the lip consists of about eight warts, which are slightly downy, and not of nine smooth finger-like processes; its stigma is nearly orbicular, and not long and narrow, and the wings of the column are exceedingly small; and finally, both the pseudo-bulb and the leaves have a singularly yellow tint, as we are informed by Mr. George Loddiges.

Like the rest of the genus it requires a hot and damp stove.

^{*} See folio 1542.







* PHYSIANTHUS albens.

White Bladderbloom.

PENTANDRIA DIGYNIA.

Nat. ord. Asclepiadex, R. Br. (Introduction to the Natural System of Botany, p. 210.)

PHYSIANTHUS Martius. Corolla campanulata, tubo inflato-ventricoso, limbo 5-fido connivente. Columna fructificationis inclusa. Corona staminea inclusa, 5-phylla, foliolis tubo stamineo insertis, deinde corolla adnatis, sursum liberis cucullatis. Anthera membrana terminata. Pollinis massa 10, ceracea, compresso-clavata, in cruribus retinaculi deflexis pendula. Stigma biapiculatum. Semina comosa. Martius nov. g. et sp. 1. p. 53.

Ph. albens; herbacea, volubilis, foliis oppositis integerrimis acutis basi cordatotruncatis subtùs albo pruinosis, floribus subdichotomo-cymosis. Martius l. c. t. 32. Graham in Edinb. New Phil. Journ. Oct. 1832. Bot. Mag. 3201.

Corolla alba, coriacea, campanulata; limbo patulo, laciniis ovatis undulatis medio roseo penicillatis; tubo basi ventricoso. Corona staminea ima basi corollæ inclusa; appendiculis 5, ovatis, carnosis, extrorsùm cucullatis, inflexis, staminibus oppositis. Stamina connata in conum pistillum circumdantem; antherarum loculis sagittatis, staminei coloris. Pollinia pendula, glandula nigra. Stigma globosum, apice bicorne. Squamæ hypogynæ O.

We received a specimen of this rare plant in August last from Mr. Blair, gardener to Miss Martineau, as a native of Mexico. Upon comparing it, however, with the figure of *Physianthus albens*, given by von Martius from specimens collected by him in the woods of Ypanema in the Province of St. Pauls, and with the plate in the Botanical Magazine of the same plant from Buenos Ayres, we are obliged to conclude either that there has been some mistake with regard

^{*} Literally bladder-flower, in allusion to the inflated corolla.

to its introduction to the London gardens, or that it stretches over a very great extent of the American Continent.

It is a climbing plant, which runs rapidly over the rafters of a hothouse, or greenhouse, and may be easily propagated by cuttings.





* BLÉTIA refléxa.

Reflexed Bletia.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Epidendreæ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

BLETIA.—Supra, vol. 17. fol. 1401.

B. reflexa; sepalis lineari-lanceolatis lateralibus reflexis, petalis cuneato-lanceolatis supra columnam conniventibus, labelli trilobi lobis lateralibus rotundatis planis intermedio angusto undulato lamellis 5 altis parallelis indivisis ad pedem columnæ decurrentibus, foliis angustis ensiformibus plicatis.

Folia angusta, ensiformia, plicata. Scapus 1½-2-pedalis, teres, distanter vaginatus, 2-4-florus. Bractew oblongo lineares, membranacew, ovario duplo breviores. Sepala angusto lanceolata, ex viridi rubescentia basi alba; lateralia reflexa, supremum paulò latius magis erectum, apice tantùm reflexum. Petala ex viridi rubescentia, cuneato-lanceolata, erecta, acuta, collateralia columnam a tergo tegentia. Labellum cucullatum, parte inferiore album, cum basi columnæ articulatum, oblongum, trilobum; lobis lateralibus erectis rotundatis, albis, margine roseis, intermedio elongato pariter rotundato, crispo, atropurpureo, patente, lamellis 5 altis integris subundulatis totum axim labelli percurrentibus. Columna purpurea, clavata, apice alata, dente unico incurvo post cardinem antheræ. Pollinia 8, quorum 4 cæteris minora.

Drawn in the hothouse of the Messrs. Loddiges, in November 1834. It is a terrestrial species, and a native of Mexico. The greenish colour of its flowers, and the remarkably narrow reflexed sepals, distinguish it at once from the remainder of the genus.

The specimen figured was less brilliant in its colours, and altogether smaller than is to be expected hereafter; for wild specimens now before us, collected by Baron de Karwinsky, and forming part of the Royal Bavarian Museum, have a rich purple cast upon every part of the flowers, and the scapes each bear from two to four blossoms.

Requires the same treatment as other Bletias.

^{*} Sec folio 1401.









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* CAPRIFÓLIUM hispidulum.

Bristly Honeysuckle.

PENTANDRIA MONOGYNIA.

Nat. ord. Caprifoliaceæ, Juss. (Introduction to the Natural System of Botany, p. 206.)

CAPRIFOLIUM.—Supra, vol. 15. fol. 1232.

C. hispidulum; tota hispido-pilosa, umbellis pedunculatis, corollis glabris bilabiatis tubo limbo duplò longiore, staminibus exsertis, foliis petiolatis cordato-ovatis obtusis subtus glaucis summis sessilibus liberis, caule filiformi. Lonicera hispidula. Douglas.

Caulis in genere debilis, filiformis, volubilis, vel prostratus, pilis rectis distantibus ut ferè omnes aliæ partes, hispidus. Folia parva. Flores parvi, rosei, pedunculis foliorum ferè longitudine, glomerulis bibracteatis.

A very rare hardy shrub, discovered by Mr. Douglas in the woods of North West America. It is quite different from all the other honeysuckles, and is nearly scentless.

It will not readily grow more than two or three feet high, and seems as if it preferred lying prostrate to twining round other plants. In common soil it can scarcely be kept alive, but in peat and loam it grows as readily as any other hardy American plant.

Our drawing was made in the garden of the Horticultural Society in July last.

^{*} Sec fol. 1232.







* LEPÁNTHES tridentáta.

Three-toothed Lepanthes.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidem § Malaxidem, Lindl. (Introduction to the Natural System of Botany, p. 262.)

LEPANTHES Swz. Sepala patula, basi, præsertim lateralia, connata. Petala 2, libera, nana. Labellum apice sub-bilobum, cum columna connatum. Columna teres, nana, aut clongata. Pollinia 2.—Herbæ epiphytæ, caulibus filiformious, monophyllis, vaginatis, spicis terminalibus, Pleurothallis omnind habitu. Flores parvi, lutescentes vel rubescentes.

L. tridentata; folio ovato acuto apice tridentato, pedunculis subbifloris folio longioribus, sepalis ovatis lateralibus semiconnatis, petalis semisagittatis tomentosis, labelli ciliati lobis lateralibus rotundatis, intermedio brevissimo acutiusculo incurvo, columna nana.

L. tridentata. Swartz Prodr. p. 125. fl. Ind. occ. p. 1561.

Caules cæspitosi, vaginis lævibus laxis cincti, staturá a lineis 2 usque ad uncias totidem variantes. Folia ovato-oblonga, 1½ unciam longa, crassa, apice acutè tridentata, subtus pallidiora. Pedunculi terminales, bracteati, subbiflori, foliis longiores. Flores parvi, bilabiati, oculo nudo purpureo-lutei. Sepala ovata, acuta, æqualia; supremum purpureum luteo-marginatum; lateralia semiconnata lutescentia, parum purpurata. Petala atropurpurea, tomentosa, semisagittata: lobo postico rotundato, sepalis dimidio breviore. Labellum minus, lutescens, basi concavum, purpurascens, cum basi columnæ connatum eåque parallelum, imò longius; trilobum, lobis lateralibus ascendentibus ciliatis columnam amplectantibus, intermedio incurvo minimo, minùs manifestè ciliato. Columna teres, minima, bicornis, basi tantum labello adnata; stigmate depresso subcuneiformi. Pollinia 2, parallela, conica, caudiculis apice incrassato aurantiaco cohærentibus.

This which is one of the most pigmy of Orchideæ, not much exceeding in size the moss amongst which it grows, will nevertheless amply repay the observer for a careful exami-

^{*} So called from $\lambda \epsilon \pi o \varsigma$ bark, or $\lambda \epsilon \pi \iota \varsigma$ small, and $\alpha \iota \varphi o \varsigma$ a flower; because the plants of this genus have very small flowers and grow upon the bark of trees.

nation of it. In order to explain its singular structure we have given magnified figures of the more important parts of its fructification.

The first thing that strikes us is the singular termination of its leaves, which do not end in a sharp point as it seems to the naked eye; but have three little delicate teeth (fig. 2.). The flowers are covered externally by three sepals, the uppermost of which is purple with a yellowish border, and the lateral ones yellow with a little stain of purple; these are frosted over with brilliant little tubercles, and glitter in the sunshine as if encrusted with emeralds. The petals are two deep purple downy parts (fig. 2.), standing upright in the centre of the blossom, and forming a sort of back for the column to rest against; the column itself (fig. 5.) is a minute two-horned body, which buries its head between the lobes of the labellum (fig. 3.); and the latter is a yellowish three-lobed downy organ, whose two lateral divisions stand up on each side of the column, in the form of tiny bucklers ready to defend it from aggression, while the centre lobe projects in the fashion of a little horn (fig. 3. and 4.).

This is the first species of the genus which has been seen alive in Europe. It is a native of the highest parts of the mountains of Jamaica, where it is found growing on the bark of trees, among mosses. It can only be preserved alive with great care by being kept under a bell glass among damp moss in a cool part of a stove. We received it from Messrs. Loddiges in January last.





* ÓROBUS atropurpúreus.

Dark Purple Orobus.

DIADELPHIA DECANDRIA.

Nat. ord. Leguminosæ, Juss. (Introduction to the Natural System of Botany, p. 87.)

OROBUS L. Calyx campanulatus, 5-fidus, lobis 2 superioribus brevioribus. Corolla papilionacea. Stamina diadelpha. Stylus gracilis, linearis, apice villosus. Legumen cylindraceum, oblongum, 1-loculare, bivalve, polyspermum. Semina hilo lineari.——Herbæ erectæ. Stipulæ semisagittatæ. Petioli in setum brevem simplicem desinentes. Folia abruptè pinnata, paucijuga. Racemi axillares, pedunculati. De Cand. prodr. 2.376.

- O. atropurpureus; caule sub-simplici striato, foliis 1-plurijugis, foliolis linearibus acuminatis glabris, stipulis semisagittatis subunidentatis, pedunculis foliis longioribus, racemis densis secundis multifloris, corollis elongatis.
- O. atropurpureus. Desf. fl. atl. 2. 157. t. 196. De Cand. prodr. 2. 386.
- O. siculus. Rafin. caratt. 72.
- O. Rafinesquii. Presl. del. Prag. 41.

A native of wild places near Algiers, where it was first noticed by Desfontaines. It is also met with in Sicily, and in the loamy meadows of eastern Calabria, near Cotrone and Cassano. In the gardens it is a hardy perennial, flowering in May; our drawing was made in the Garden of the Horticultural Society.

It varies in the number of its leaflets from one to several pair; Desfontaines' figure and ours represent extreme states.

^{*} Said to be so named from $o\rho\omega$ to excite and $\beta o\nu g$ a bullock; that is to say, exciting to cattle. The Orobus of the Greeks was some sort of vetch.











* CLAVÍJA ornáta.

Elegant Clavija.

PENTANDRIA MONOGYNIA.

Nat. ord. Ardisiaceæ § C. Theophrastea, Bartl. ord. nat. p. 165.

THEOPHRASTEACEE, D. Don in G. Don. gen. syst. 4. p. 24.

CLAVIJA.—Ruiz et Pavon. Calyx 5-partitus. Corolla rotata, 5-loba. Coronæ appendices 5. carnosæ, adnatæ. Filamenta in tubum connata! Antheræ cohærentes. Ovarium l-loculare, multi-ovulatum. Bacca crustacea, mono-polysperma.—Arbores (Amer. Æquin.) sempervirentes, trunco simplicissimo, recto, more Palmarum apice frondoso. Folia alternatim conferta, undique patentia, oblonga, coriacea, glabra, reticulato-venosa, margine dentato-spinosa v. integerrima; petioli basi callosi. Flores racemosi, albi aut aurantiaci. D. Don. MSS.

C. ornata, foliis elongato-lanceolatis mucronatis dentato-spinosis, petiolis unguicularibus, racemis glabris, baccis subdispermis. D. Don.

Clavija ornata. D. Don in edinb. phil. journ. January 1831. in G. Don

gen. syst. 4. p. 25.

Theophrasta longifolia. Jacq. coll. 4. p. 136. hort. schanbr. 1. t. 116. Spreng. syst. 1. p. 670.

Arbor (in caldario culta) vix ultrà 6-pedalis, tamen in loco natali sæpè altitudinem 20 pedum attingens, trunco recto, simplicissimo, apice frondoso, cortice fusco rugoso-rimoso induto. Folia conferta, subverticillata, patentia, oblongo-spathulata v. lanceolata, mucronata, dentato-spinosa, lætè viridia, glaberrima, cartilaginea, suprà nitidula, pedalia v. sesquipedalia, spithamam lata, costá validá pallidiori subtùs elevatá, ramis primariis transversis parallelis, venulisque ramosissimis reticulata, basi attenuata, integerrima. Petioli unguiculares, robusti, fusco-purpurei, supra planiusculi. supra-axillares, simplices, multiflori, palmares v. spithamæi, plerumque penduli, axi tereti, glabro, viridi. Flores odore Primulæ veris fragrantissimi, crocei, undique sparsi, inferioribus sapè abortivis. Pedicelli brevissimi, robusti, teretes, glabri, pallidè aurantiaci. Calyx 5-partitus, persistens: laciniis rotundatis, coriaceis, impresse punctatis, margine membranaceis, leviter erosis, astivatione imbricatis. Corolla rotata, substantiá crassá coriaced; tubo brevissimo, subobconico, intus sulcato; limbo 5-lobo, patulo; lobis subrotundis, integerrimis, astivatione imbricatis, disco convexiusculis. Coronæ appendices 5, flavæ, carnosæ, deltoideæ, adnatæ, tuberculiformes, suprà bisulcatæ, lobis corollæ alternæ. Stamina 5, corollæ lobis opposita; filamenta in tubum membranaceum infernè ventricosum connata; antheræ cohærentes, extrorsæ, biloculares, appendiculá brevissimá rotundatá mem branacea coronatæ; loculis oblongis, distinctis, parallelis. Pollen pulvereum. Ovarium liberum, pyramidatum, uniloculare, aurantiacum; ovulis numerosis,

^{*} Named by the authors of the Flora Peruviana in compliment to Jose Clavijo Faxardo, a Spanish Naturalist, who translated the works of Buffon into his own language.

placenta centrali insertis. Stylus vix ullus. Stigma peltatum, 5-angulum pruinosum. Bacca magnitudine Cerasi minoris, subglobosa, crustacea, lateribus parum compressa, unilocularis, evalvis, plerumque disperma, rarò mono v. trisperma, basi calyce et apice stylo persistentibus instructa, crusta intis virenti nervis venisque plurimis peragrata. Semina subrotunda, substantia pulposa copiosè tecta, subinde drupacea! aquâ tepidâ madida pulpa exit voluminosa, basi umbilico amplo orbiculato concaviusculo instructa: testa cartilaginea; albumen magnum, corneum, pellicula membranacea arctè adhærenti vestitum. Embryo erectus, axilis, lacteus: cotyledones ovales, subfoliaceæ; radicula cylindracea, obtusa, cotyledonibus subæqualis, umbilico obversa. D. Don. MSS.

This very elegant tree is a native of Caraccas, whence it was introduced to the Imperial Gardens at Schönbrunn, where it flowered for the first time in November 1789, and a description and figure have been given of it by the elder Jacquin in his magnificent work on the plants of that garden. A number of young plants were raised at the late Mr. Colvill's nursery, in 1829, from seeds collected in Caraccas by Mr. Fanning, to whom I am indebted for specimens of the ripe fruit. The young plants were observed to vary a good deal in the breadth of their leaves, and as some of them produced flowers in the spring of 1834, they were found to agree precisely with the plant here figured, which blossomed about the same time in the stove of the Chelsea Botanic Garden, and which had been previously introduced from the continent under the name of Theophrasta latifolia.

The plant loves a high temperature, and should be grown in a soil composed of equal parts of loam and vegetable earth, and plenti-

fully supplied with water while in a growing state.

The late Sir James Edward Smith has expressed, in Rees's Cyclopædia, a suspicion of this species being identical with the *Eresia* of Plumier, the *Theophrasta americana* of Linnæus; but the latter having a large polyspermous fruit, and the former having seldom more than two seeds, completely sets the question at rest as to their

specific difference at least.

The Theophrasteaceæ, consisting of Theophrasta, Clavija, Jacquinia, and Leonia, constitute a small group intermediate between Myrsineæ and Sapoteæ, being distinguished from the former by their polyspermous fruit, foliaceous embryo, extrorse anthers, and by the presence of coronary appendages alternating with the stamina, and which are to be regarded as the rudiments of a second series of those organs. Theophrasta agrees with the present genus in having extrorse anthers, but differs in its campanulate corolla, annular inclosed crown, and free stamina.

The dried flowers and seeds of Clavija and Jacquinia when immersed in warm water emit an agreeable fragrance resembling

that of the Primrose. D. Don.

For these valuable notes we are indebted to Mr. Don, who had an opportunity of examining the specimen from which our drawing was made. We are only acquainted with the plant from the accounts of Jacquin to which Mr. Don has referred.

Genus incertæ sedis.

96. Tozzia, Linn. Corolla Gratiolearum, stamina Gerardiearum, vel Rhinanthearum. Capsula abortu monosperma.

Genera mihi non satis nota. Conobea, Aubl. Gomara, Sanchesia, Xuarezia et Calytriplex, Ruiz et Pav. Leucophyllum, Humb. et Kunth. Dichroma, Cav. Curtia, Cham. et Schlecht. Lafuentia, Lag. Hemianthus, Nutt. Willichia, Mut. (Hydranthelium, Humb. et Kunth.). Aptosimum, Burch. Hydrotriche, Zucc. Diceros, Picria et Tripinna, Lour. Bæa, Commers. Palmstruckia, Retz, fil.

80. ? SEYMERIA, Pursh. Calyx 5-partitus. Corolla rotato-campanulata.

Capsula acuta (Afzelia, Gmel.)

81. Glossostylis, Cham. et Schlecht. Calyx 2-5-dentatus. Corolla oblique campanulata. Semina intra membranam lineari-cuneatam minima. (Species observatæ tres: 1. G. aspera Cham. et Schlecht. Brasiliensis, 2. Rhinanthus scaber Thunb.? Capensis, 3. Hymenospermum dentatum Benth. Avensis, et forsan quarta inter plantas Senegalenses Perrottetianas).

*** Calyx compressus hinc fissus.

82. Centranthera, Br. (Razumovia, Spreng.?)

Tribus XII. RHINANTHEÆ. Corollæ limbus bilabiatus labio superiore concavo galeato vel lineari, integro vel emarginato, inferiore patente trifido. Stamina fertilia 4 didynama (rarius 2) adscendentia. Antheræ biloculares loculis discretis parallelis sæpe acuminatis. Stylus simplex. Capsula 2-valvis loculicide dehiscens valvulis sæpissime integris. Seminum nunc testa laxa membranacea inclusa, nunc nuda.

* Antherarum loculi tenues mutici.

83. Orthocarpus, Nutt. Antherarum loculi inæquales. Calyx tubulosus vel campanulatus 4-fidus.

84. Castilleja, Mut. Antherarum loculi inæquales. Calyx compressus

bifidus vel quadrifidus hinc fissus (Euchroma, Nutt.).

85. Schwalbea, Linn. Antherarum loculi æquales. Calyx compressus oblique 5-fidus.

** Antherarum loculi crassi sæpius acuti vel aristati.

86. Lamourouxia, *Humb. et Kunth*. Corolla tubulosa compressa ventricosa labio inferiore brevi. Calyx 4-5-fidus.

87. CYMBARIA, Linn. Corolla tubulosa ventricosa. Calyx 10-partitus.

88. Odontites, Stev. Calyx campanulatus 4-fidus. Corolla profunde bilabiata labio superiore laciniisque inferioris subæquilongis integerrimis vel intermedia retusa. Antheræ oblongæ galeam superantes.

89. Euphrasia, Linn. Calyx campanulatus 4-fidus. Corollæ labium superius galeatum emarginatum inferius magnum patens laciniis emarginatis (Paren-

tucellia, Viv.?)

90. SIPHONOSTEGIA, Benth. Calyx infundibuliformis tubo elongato limbo 4-5-partito. Corollæ labium superius incurvum inferius brevius (Species unica Chinensis).

91. Bartsia, Linn. Calyx campanulatus vel tubulosus 4-fidus. Corollæ labium superius galeatum compressum inferioris laciniæ integerrimæ. Antheræ ovatæ galea breviores (Trixago, Stev.).

92. PEDICULARIS, Linn. Calyx 5-fidus vel inæqualiter 2-3-fidus. Corollæ

galea elongata sæpius incurva.

93. Rhinanthus, Linn. Calyx compressus membranaceo-inflatus. Corollæ labium superius galeatum. Semina pauca ala membranacea cincta (Alectorolophus, Stev.).

94. Elephas, Tourn. Corollæ labium superius lineare proboscideum.

Semina pauca striata (Rhinanthus, Stev.).

95. Melampyrum, Linn. Corollæ galea compressa lobis replicatis. Semina in loculo solitaria magna exalata.

Tribus IX. TEFDIEÆ. Corolla tubulosa bilabiata vel subinfundibuliformis, limbo subæqualiter 5-fido. Stamina fertilia 4 tubo inclusa didynama vel subæqualia distantia. Antheræ biloculares. Fructus baccatus.

* Bacca indehiscens.

Corolla bilabiata. Calyx 5-dentatus. 62. LEUCOCARPUS, Don. 63. Teedia, Rud. Corollæ limbus subæqualis. Čalyx 5-partitus.

** Capsula baccata 4-valvis.

64. Hemiphragma, Wall.

Tribus X. VERONICEÆ. Corolla rotata infundibuliformis vel rarius irregulariter bilabiata. Stamina fertilia nunc 4 (vel 6-7?) subæqualia exserta distantia nunc 2 (superiora) inferiorum vestigiis nullis. Stylus simplex stigmate tenui vel rarius incrassato subcapitato. Capsula 2-valvis loculicide dehiscens valvulis sæpissime septicide bifidis bipartitisve. Semina nuda vel testa laxa arilliformi inclusa.

* Stamina 4 (vel 6-7?). Corolla 5 (vel 6-7?) fida.

65. Ourisia, Comm. Corolla campanulata 5-fida. Stamina 4.

66. ? DISANDRA, Linn. Corolla rotata 6-8-fida. Stamina 5-7. (An hujus ordinis?)

67. SIBTHORPIA, Linn. Corolla rotata 5-fida. Stamina 4. ** Stamina 4. Corolla 4-fida.

68. Scoparia, Linn. Corolla rotata.

69. GEOCHORDA, Cham. et Schlecht. Corolla infundibuliformis.

70. PICRORHIZA, Royle. Corella campanulata calyce brevior. (Veronica Lindleyana, Wall.) * * * St imina 2.

71. VERONICA, Linn Corolla rotata vel infundibuliformis (Pæderota, Linn. Leptandra, Nutt. Diplophyllum, Lehm. Cochlidiospermum, Reichb. Omphalospora, Bess. Hebe, Juss. Aidelus, Spreng.).

72. CALORHABDOS, Benth. Corolla tubulosa incurva ore oblique 2-3-fido

(Veronica Brunoniana, Wall.).

73. Wulfenia, Jacq. Corolla tubulosa recta limbo subbilabiato.

4-5-partitus.

 $\hat{7}4$. Gymnandra, *Pall*. Corolla tubulosa recta limbo subbilabiato. Calyx 2-partitus (Lagotis, Gærtn.)

Tribus XI. GERARDIEÆ. Corolla campanulata infundibuliformis vel tubulosa, limbo 5-fido laciniis rotundatis planis. Stamina fertilia 4 adscendentia. Antheræ approximatæ 2-loculares loculis discretis parallelis sæpe acuminatis. Stylus simplex, stigmate obtuso sæpius elongato. Capsula 2-valvis loculicide dehiscens valvulis integris bifidisve. Semina sæpissime testa membranacea laxa arilliformi inclusa.

* Calyx 5-dentatus. Corolla infundibuliformis.

75. Escobedia, Ruiz et Pav. Corolla tubus elongatus limbo amplo 5-fido.

76. Physocalyx, Pohl. Calyx inflatus. Corollæ limbus parvus æqualiter 5-fidus.

** Calyx 5-dentatus vel 5-fidus. Corolla campanulata vel tubulosa. 77. VIRGULARIA, Ruiz et Pav. Calyx 5-dentatus. Corolla ample tubulosa.

78. MACRANTHERA, Nutt. Calyx profunde 5-fidus. Corolla tubulosa vel incurva. Capsula acuminata.

79. GERARDIA, Linn. Calyx 5-dentatus vel semi-5-fidus. Corolla campa.

nulata. Capsula obtusa (Melasma, Berg.? Sopubia, Hamilt.).

- 45. ? ACHETARIA, Cham. et Schlecht. Stamina inferiora fertilia. Capsulæ valvulæ bipartibiles.
 - ** ** * * Stamina fertilia 2. Calyx 3-5-dentatus vel 5-fidus.
- 46. DOPATRIUM, Hamilt. Corolla calyce multo longior fauce ampliata (Gratiola juncea, lobelioides et nudicaulis).

47. MICROCARPÆA, Br. Corolla calycem minutum vix excedens.

Capsulæ valvulæ 2 integræ mar-§ 3. Antherarum loculi contigui. ginibus planis, dissepimento membranaceo parallelo. * Stamina fertilia 2.

Stamina sterilia nulla. Capsula sæpius irregulari-48. PEPLIDIUM, Delil.

ter rupta valvulis vix solutis.

49. Bonnaya, Link. et Ott. Stamina sterilia 2. Capsula constanter valvatim dehiscens.

** Stamina fertilia 4, inferiorum filamenta basi appendiculata vel

gibba.

50. VANDELLIA, Linn. Calyx 5-partitus vel regulariter 5-dentatus non plicatus. Corollæ tubus intus nudus (Tittmannia, Reichb. Torenia, Chum. et Schlecht.).

51. ARTANEMA, Don. Calyx 5-partitus. Corollæ tubus intus 4-squamatus

(Diceros, Pers. non Lour.).

52. TORENIA, Linn. Calyx tubulosus plicatus oblique 5-dentatus (Nortenia, Dup. Thou.).

*** Stamina fertilia 4, filamentis nudis integris.

53. ? HETERANTHIA, Nees et Mart. Antheræ filamentorum inferiorum magnæ stylum amplectentes (Vrolikia, Spreng.).

54. LINDERNIA, Linn. Anthera conformes. Calyx 5-partitus.

55. Limosella, Linn. Antheræ conformes. Calyx 5-dentatus vel 5-fidus.

Tribus VII. BUCHNEREÆ. Corolla tubo tenui, limbo subplano 4-5-fido, laciniis sæpe bifidis. Stamina fertilia 4 didynama adscendentia. Antheræ uniloculares vel loculis demum divaricatis confluentibus. Capsula 2-valvis valvulis integris bifidisve. Genera nonnulla Selagineis habitu affines.

* Capsulæ valvulæ loculicido-dehiscentes elasticæ integræ.

- 56. BUCHNERA, Linn. (Campuleia, Dup. Thou. tubo apice incurvo. Piripea, Aubl. tubo apice recto.)
 - ** Capsulæ valvulæ bifidæ marginibus septiferis inflexis.

57. Nycterinia, Don. Calyx oblongo-tubulosus 5-angulatus 5-dentatus. Corollæ laciniæ emarginatæ vel bifidæ (Erini Capenses).

58. Erinus, Linn. Calyx 5-partitus. Corollæ laciniæ emarginatæ (E.

alpinus).

59. Manulea, Linn. Calyx 5-partitus. Corollæ laciniæ integerrimæ in-

æquales (Nemia, Berg.).

60. Sutera, Roth. Calyx 5-partitus. Corollæ laciniæ 5 brevissimæ integræ æquales vix patentes (S. glandulosa, Roth. et Capraria multifida, Linn.?).

Tribus VIII. Buddleieæ. Corolla tubo recto, limbo plano patente æqualiter 4-fido. Stamina fertilia 4 subæqualia. Antheræ distantes biloculares. Capsula 2-valvis.

61. BUDDLEIA, Linn.

28. DIGITALIS, Linn. Corolla declinata labio inferiore longiore. 29. ISOPLEXIS, Lindl. Corolla incurva labio superiore longiore.

Tribus VI. Gratioleæ. Corolla tubulosa limbo bilabiato. Stamina fertilia 2 vel 4 adscendentia. Antheræ biloculares muticæ. Capsula 2-4-valvis septicide vel loculicide dehiscens valvulis integris bifidisve, placentæ dissepimento non bipartibili demum libero adnatæ. Semina nuda.

§ 1. Antherarum loculi disjuncti.

30. Pterostigma, Benth. Stamina superiora fertilia antherarum loculis disjunctis, inferiora sterilia vel dimidiata. Calyx sub 5-partitus lacinia suprema majore. (Adenosma villosum, A. macrophyllum et Stemodia capitata. Benth. in Wall. Cat. n. 3851, 3853 et 3926, cum specia quarta nova ex China.)

31. LINDENBERGIA, Link. et Otto. Stamina 4 fertilia loculis disjunctis.

Calvx semi 5-fidus (Brachycoris, Schrader, Bovea, Decaisne).

- 32. Stemodia, Linn. Stamina 4 fertilia loculis disjunctis. Calyx 5-partitus (Modestia et Diamoste, Cham. et Schlecht. Cybbanthera, Hamilt.)
 - § 2. Antherarum loculi contigui. Capsulæ valvulæ 4 vel si 2 loculicide dehiscentes vel fissæ.
 - * Stamina fertilia 4. Calyx semi-5-fidus. Capsulæ valvularum margines septiferæ inflexæ.

33. Dodartia, *Linn*. Calyx tubuloso-campanulatus dentibus rectis. Corollæ labium inferius basi papillosum bigibbosum. Herba rigida paucifoliata.

34. Mazus, Lour. Calyx campanulatus dentibus patentibus. Corollæ labium inferius basi papillosum bigibbosum. Herbæ humiles scapis subnudis Hornemannia, Willd.).

35. Limnophila, Br. Calyx tubuloso-campanulatus labio inferiore glabro

laciniis planis. Herbæ uliginosæ.

** Stamina fertilia 4. Calyx 5-partitus. Capsulæ valvularum margines septiferæ inflexæ.

36. ? CAPRARIA, Linn. Corolla vix bilabiata. Stigma obtusum vix incrassatum (C. biflora, Linn.).

37. Morgania, Br. Corolla bilabiata. Stigma bilamellatum.

*** Stamina fertilia 4. Calyx tubulosus 5-dentatus. Capsulæ valvularum margines subplanæ.

38. Mimulus, Linn. Capsula 2-valvis. 39. Uvedalia, Br. Capsula 4-valvis.

**** Stamina fertilia 4. Calyx 5-partitus. Capsulæ valvularum margines planæ.

40. Herpestis, Gaertn. Capsulæ valvulæ bipartitæ. Calyces laciniæ valde

inæquales (Monniera Mich. Bramia Lam.).

41. SPHÆROTHECA, Cham. et Schlecht. Capsulæ valvulæ bipartitæ. Ca-

lycis laciniæ subæquales.

42. MATOUREA, Aubl. Capsulæ valvulæ subintegræ loculicide dehiscentes. Calycis laciniæ parum inæquales (Species americanæ 4-5 inclusa Gratiola acuminata, Elliott.).

*** * * Stamina fertilia 2. Calyx 5-partitus.

43. Gratiola, Linn. Stamina superiora fertilia.

44. Beyrichia, *Cham. et Schlecht*. Stamina inferiora fertilia. Capsulæ valvulæ vix fissæ (Sp. 4, Brasilienses).

11. Anarrhinum, Desf. Corolla bilabiata. Capsula operculis 2 valviformibus deliiscens.

12. Linaria, Tourn. Corolla personata. Capsula operculis circumscissis vel plurimis dentiformibus vel valviformibus dehiscens.

* Corolla basi saccata gibba vel æqualis.

13. Antirrhinum, Linn. Corolla personata. Capsula apice poris vel foraminibus 2-3 dehiscens.

14. MAURANDIA, Jacq. Corolla personata. Capsula apice dentibus 10

dehiscens (Usteria, Cav.).

15. Galvesia, Juss. Corolla bilabiata. Capsula sub apice irregulariter

rumpens; tubus corollæ intus nudus (Agassizia, Chavannes).
16. Lophospermum, Don. Corolla bilabiata. Capsula sub apice irregula-

riter rumpens; tubus corollæ intus pilorum seriebus 2 percursus.

17. Rhodochiton, Zucc. Calyx amplus coloratus. Corollæ limbus subæqualiter 5-fidus. Capsula sub apice irregulariter rumpens.

Tribus IV. Salpiglossidez. Corolla tubo elongato rarius abbreviato, limbo obliquo nune irregulariter bilabiato nune concavo vel subplano lobis 5 sæpe incisis. Stamina fertilia 2 vel 4 didynama decl nata. Antheræ biloculares loculis apice démum sæpius confluentibus. Capsula 2-4-valvis valvulis septicide dehiscentibus bifidisve. Genera plura a Solanaceis capsularibus (præsertim a Petunia) nonnisi æstivatione corollæ imbricativa et staminibus 4 nec 5 differrunt.

* Corolla basi supra gibba limbo valde irregulari.

18. Collinsia, Nutt. Corolla 5-fida. Capsula globosa 4-valvis.

19. Schizanthus, Ruiz et Pav. Gorolla multifida. Capsula oblonga.

** Corolla infundibuliformis limbo parum inæquali.

20. Salpiglossis, Ruiz et Pav. Corollæ tubus ampliatus subrectus, limbi explanati laciniæ emarginatæ vel bifidæ.

21. Browallia, Linn. Corollæ tubus tenuis rectus apice parum dilatatus,

limbi lobis integerrimis emarginatisve.

22. Franciscea, Pohl. Corollæ tubus tenuis apice incurvus, limbi lobis

integerrimis planis.

23. ? Brunsfelsia, Linn. Corollæ tubus elongatus rectus æqualis, limbi lobis integerrimis planis. Capsula baccata.

24. Anthocercis, Labill. Corollæ tubus ampliatus limbo subrecto.

Tribus V. DIGITALEÆ. Corolla tubulosa sæpius ventricosa limbo bilabiato. Stamina basi declinata apice sæpissime adscendentia, 4 fertilia didynama, quinto summo sterili vel nullo. Antheræ biloculares loculis demum sæpissime divaricatis confluentibus. Stigma simplex, vel in lobis brevibus styli 2 vix incrassata. Capsula dura bivalvis, valvulis septicide dehiscentibus sæpius bifidis vel bipartitis, dissepimento duplicato e marginibus valvularum inflexis demum bipartibili. Placentæ a dissepimento demum sæpius solutæ. Genera priora Bignoniaceis affinia sed abunde distincta. Tribus habitu magis quam characteribus a Gratioleis differt.

* Stamen quintum præsens sterile.

25. Chelone, Linn. Corollæ labium superius amplum concavum. Semina membranaceo-alata.

26. Pentstemon, Lhér. Corollæ laciniæ subplanæ. Semina nuda.

** Staminis quinti vestigium nullum. 27. Russella, Jacq. Corollæ laciniæ vix inæquales.





Sub by J. Fridgway 163 Piccadilly Sune . 1. 1835.

* EPIDÉNDRUM grácile.

Graceful Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. Orchider, Juss. (Introduction to the Natural System of Botany, p. 262.)

EPIDENDRUM.—Supra, vol. 1. fol. 17.

E. gracile; foliis in pseudobulbos ovatos corrugatos pluribus levato-ensiformibus, racemo simplici longissimo, sepalis oblongis petalisque cuneatis patentibus, labelli ferè liberi trilobi lobis lateralibus semiovatis intermedio oblongo crispo obtusissimo duplò minoribus disco bicostato.

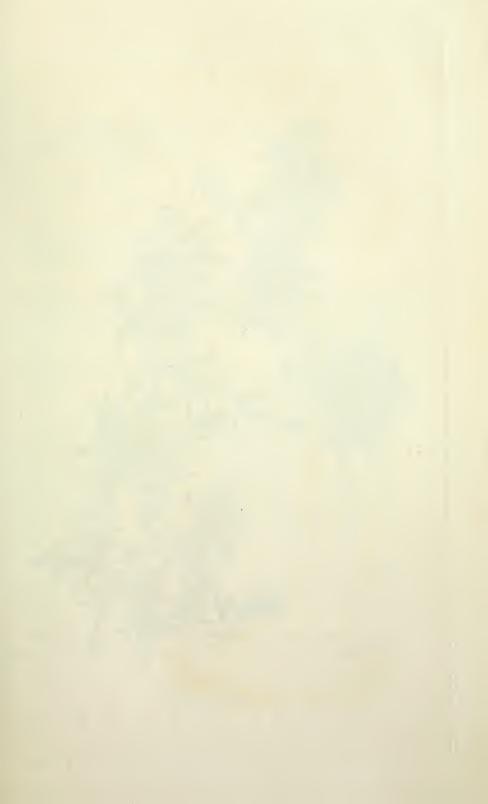
Labellum tripartitum, cum basi columnæ leviter connatum; laciniis lateralibus erectis, semiovatis, obtusis, subundulatis, flavis sanguineo venosis, intermediá subrotundá crispá ejusdem coloris brevioribus; in medio crassum, album venis purpureis, bicostatum; costis utrinque infra medium obsolete unidentatis. Ovarium brevè cuniculatum. Columna semiteres, marginata apice utrinque auriculata. Gynizus deorsum trilobus; rostillum crassum, breve, rotundatum. Anthera complete 4-loculares; dissepimentis membraná marginatis. Pollinia 4, compressa basi unidentata; caudiculis totidem pulvereis replicatis.

A native of the Bahamas, whence it was sent to the Horticultural Society by John Campbell Lees, Esq. in 1833. From a plant which flowered last September the accompanying drawing has been taken.

The plant is very nearly allied to E. odoratissimum, but its leaves are three times as long, and the flowering stem shoots up to the length of three feet, without a branch or a leaf beyond the little scales that appear upon it here and there; the flowers moreover are larger, and the form of the segments of the lip materially different, while the

callosities upon the disk of the latter distinguish it positively. In E. odoratissimum the disk is simply thickened and flattened and gradually thins away towards the base; in E. gracile it is distinctly two-ribbed, and has two obsolete teeth a little below the middle.

The want of beauty in this plant is amply compensated for by its delicious fragrance, early in the morning and at night. It seems as if it were more terrestrial than epiphytal, and grows freely in any light well drained soil. The patch sent home by Mr. Lees consisted of a mass of pseudo-bulbs nearly two feet in diameter.





* VERBÉNA multifida; var. contracta.

Dwarf Purple Vervain.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Verbenaceæ, Juss. (Introduction to the Natural System of Botany, p. 238.)

VERBENA.—Supra, vol. 4. fol. 294.

V. multifida; diffusa pilosa, foliis 3-5-partitis laciniatis, corymbis subcapitatis pedunculatis, calycibus hispidė pilosis, corollæ laciniis patentibus emarginatis.
V. multifida. Flora Peruv. vol. 1. p. 21. tab. 33. f. c. Syst. p. 338. (1798.)
V. erinoides. Willd. enum. p. 634. no. 12. (1809!)—Hooker Bot. Misc. 1. 168.

Erinus laciniatus. Linn. Sp. Pl. 879.

"Lychnidea Verbenæ tenuifoliæ folio, vulgò Sandia Laguen. Feuill. Per. v. 3. t. 25."

One of the commonest of all plants on the alps of Chile and Mendoza, growing according to Dr. Gillies to the elevation of 8000 feet above the level of the sea; and varying extremely in the colour of the flowers, in stature, and in the degree in which the leaves are cut. In some individuals the flowers are said to be scarlet, in others blue, in the case before us purplish, and we can scarcely doubt that the V. sulphurea of fol. 1748 is in reality another form.

It is a hardy perennial; and one of its more robust varieties is now a common ornament of the flower garden, over which it runs during the summer, forming patches several feet in diameter.

What we now figure is a dwarfer and more short-jointed kind, our drawing of which was made in the Garden of

^{*} See folio 1184.

the Horticultural Society last July. It looks almost like a species of scentless Thyme, and grows into a very dense patch which has but little disposition to extend itself.

As there is no reason why the original name of V. multifida should be made to give way to Willdenow's alteration to V. erinaides, we retain the oldest designation.





Sub by Santy of My Frenchy Jane 1. 1833

* GESNÉRA allagophýlla.

Shifting-leaved Gesnera.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Generez, Richard. (Introduction to the Natural System of Potany, p. 227.)

GESNERA.—Supra, vol. 4. fol. 329.

G. allagophylla; caule erecto piloso sæpè trigono, foliis villosis subsessilibus ternis oppositis vel sparsis lineari oblongis spatulatisve obtusis crenatis, floribus sessilibus in verticillis spicâve longâ terminali, corollæ tubo piloso cylindrico: limbo æquali patenti glabro, glandulis hypogynis duabus posticis. De Martius Nov. Gen. et Sp. pl. 3. 36.

A stove plant, our drawing of which was made last July from a specimen belonging to Mr. Young of Epsom. Unfortunately we had no opportunity of making any notes concerning its structure, and consequently we are uncertain whether it is rightly referred to the above named species. It agrees very well with von Martius' careful description, except that we did not observe the upper part of the stem to be at all triangular.

If we are right in the species to which we have referred it, this is a native of the auriferous plains of Brazil in the Province of the Mines, in various places, especially about Villa Rica, the town of S. João d'El Rey, in the Serras da Pires and da Piedade, and elsewhere. It has also been met with by Sellow, beyond the Tropic, in the Province of St. Paul's. (Martius.)

A very pretty neat species, and an interesting addition to the showy and easily cultivable genus to which it belongs.

^{*} See folio 1158.







* CAMPÁNULA Gargánica.

The Harebell of St. Angelo.

PENTANDRIA MONOGYNIA.

Nat. ord. Campanulaceæ, Juss. (Introduction to the Natural System of Botany, p. 185.)

CAMPANULA.-Supra, vol. 1. fol. 56.

C. garganica; foliis radicalibus reniformibus longissimè petiolatis, caulinis cordatis omnibus crenato-dentatis pubescentibus, floribus axillaribus subfasciculatis (subsolitariis) corollis 5-partitis. Alph. Decand. Monogr. des Campan. p. 299.

C. garganica. Tenore in Floræ neap. add. cum app. sem. h. r. neap. 1827. Sylloge, p. 95. Sweet's Brit. Fl. Gard. t. 252.

For the opportunity of figuring this rare and beautiful species of harebell we are indebted to the kindness of Mrs. Marryat of Wimbledon, in whose rich collection it flowered in great perfection in July last. It had been raised from seeds presented to Mrs. Pallisser by Professor Tenore.

The following are the observations of that Botanist concerning this little known species. It is a perennial, flowering in June, and grows wild on Mount Gargano, among the ruins of the ancient Monastery, and near fort St. Angelo. It agrees in the form of its leaves, and in the branching of its peduncles with C. Portenschlagiana; but differs in the lobes of the calyx being twice not thrice as short as the corolla, and in the deep divisions of the latter. From C. diffusa, which it resembles in many respects, it may be distinguished by its deeply 5-parted corolla, with narrow lanceolate, revolute segments, and not half 5 cleft with broad ovate spreading lobes; the flowers moreover are racemose and not corymbose. From C. Elatine it differs in its stem

being altogether diffuse and by no means ascending, tolerably firm, and from 3 to 6 inches long, in its root-leaves being nearly round and kidney-shaped, with double wavy crenellings, and not ovate, or between ovate and heart-shaped, with taper pointed pectinate teeth, in its equal corolla, which is pale blue and not bluish purple.

In many respects this account is somewhat at variance with the plant we have figured, and accords better with that published by Mr. Don in Sweet's Flower Garden; but our wild specimens from the shady rocks of Mount Gargano agree exactly with the individual that flowered in Mrs. Marryat's garden, and we conclude that the species is liable to variations in the crenelling of its leaves and in the colour and depth of the lobes of the corolla.

It is presumed that like most of the plants of the South of Italy this will require protection in winter from the heavy rains of this climate, otherwise it will probably prove hardy in the clefts of rockwork, of which it is a charming ornament.





* PSORÁLEA macrostáchya.

Long-spiked Psoralca.

DIADELPHIA DECANDRIA.

Nat. ord. Leguminosæ, Juss. (Introduction to the Natural System of Botany, p. 87.)

PSORALEA.—Supra, vol. 12. fol. 968.

P. macrostachya; foliis pinnatim 3-foliolatis pubescentibus, foliolis ovatis mucronatis, petiolis glanduloso-scabris, pedunculis axillaribus foliis quadruplò longioribus, spicis cylindraceis rachi bracteis calycibusque hirsutissimis. Decand. prodr. v. 2. 220.

Herba perennis, erecta, ramosa, 3-pedalis, undique pubescens. Foliola integerrima, utrinque præsertim supra glandulosa; lateralia petiolulata. Stipulæ membranaceæ, ovatæ, acuminatæ. Pili racheos, bractearum, calycumque nigri densissimi; pedunculorum ferè nulli. Flores decidui, rachin hirsutum rectum linguentes. Calycis labium superius 4-dentatum. Corolla purpurea calyce parum longior; alis obtusissimis. Legumen ovatum, mucronatum, pilosum, calycis longitudine. Semen oblongum, aterrimum, glabrum.

This species is described by De Candolle, from specimens communicated by La Gasca, and purporting to come from Nutka. Our drawing was however made from plants obtained from California through Mr. Douglas; and we therefore suspect some error in the former statement.

It is a handsome hardy perennial, yielding seed in tolerably plenty, and readily increasing by division. Our drawing was made in the Garden of the Horticultural Society in July of last year.

It is remarkable for the singular hairiness of the rachis and green parts of the flower, beginning abruptly with the

^{*} So named, from $\psi\omega\rho\alpha\lambda\epsilon\sigma c$ warty, in allusion to the very general presence of little tubercular secretions upon the surface of different species.

origin of the first flower, but which is scarcely at all visible on the flower-stalk itself. After the flowers have fallen off this produces a singular appearance, the naked rachis remaining at the end of each flower-stalk in the form of a long hairy tail.

Fig. 1. represents a side view of an entire flower; 2. is a front view of the same; 3. a calyx with the corolla pulled off to shew the stamens; 4. a pod, and 5. a ripe seed.







* PENTSTÉMON staticifólius.

Sea Lavender-leaved Pentstemon.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Scrophularineæ, Juss. (Introduction to the Natural System of Botany, p. 228.)

PENTSTEMON.—Supra, vol. 13. fol. 1121.

P. staticifolius; caule ascendente pubescente, foliis radicalibus oblongo-lanceolatis in petiolum longum angustatis integerrimis glabris: caulinis sessilibus cordato-oyatis dentatis pubescentibus, cymis subsessilibus calycibusque tomentosis, corollis ventricosis pubescentibus labiorum laciniis ovatis obtusis subæqualibus.

Caulis subbipedalis, apice tomentosus et cymis subsessilibus verticillastros Labiatarum referentibus onustus. Folia radicalia cum petiolo 7-poll. longa. Corolla violacea, speciosa, fere pollicem et dimidium longa.

A new hardy species of this beautiful genus, sent to the Horticultural Society by the late Mr. Douglas from California. It is most nearly related to P. diffusus, figured at fol. 1132 of this work, from which it differs in its much larger and more lilac flowers, in the form of its leaves, and in those next the root being perfectly entire.

Our drawing was made in the Garden of the Society in June last. At present the species is extremely rare; only one plant having been originally raised. It grows and flowers freely in a peat border.

See fol. 1245.

We avail ourselves of a vacant leaf or two in this number to present our Botanical friends with a revision of the whole of the genera of the natural order to which Pentstemon belongs. For this valuable contribution we are indebted to George Bentham, Esq. the learned author of the Genera and Species Labiatarum.

Tribus I. Verbasceæ, Bartl. Corolla tubo abbreviato vel subglobos o, limbo explanato 4-5-fido vel bilabiato non ringente. Stamina fertilia 2-5, sæpius declinata. Antheræ approximatæ vel cohærentes nunc uniloculares nunc subbiloculares loculis divaricatis confluentibus. Capsula bivalvis septicide dehiscens, valvulis sæpe bifidis, dissepimento e marginibus valvulorum inflexis duplicato solubili. Semina nuda. Genera Solanaceis rotatis affinia sed æstivatione corollæ abunde distincta.

* Corolla subrotata 5-loba.

1. Verbascum, Linn. Stamina fertilia 5.

- 2. Celsia, Linn. Stamina fertilia 4. Capsula globosa usque ad basin dehiscens.
- 3. Alonson, Ruiz et Pav. Stamina fertilia 4. Capsula ovato-oblonga vix ad medium dehiscens. Flores torsione pedicelli resupinati. (Hemimeris Auct. quoad species Americana).

** Corolla bilabiata labiis concavis.

- 4. Jovellana, Cav. Corollæ lobi concavi subæquales patentes.
- 5. Calceolaria, Linn. Corollæ lobus inferior incurvus calceolatus.

 *** Corolla tubo subgloboso limbo valde inæquali.

6. SCROPHULARIA, Linn.

Tribus II. Hemimerideæ. Corolla tubo abbreviato, fauce concava, limbo explanato lacinia infima (sæpe bifida) basi concava 1-2-saccata vel calcarata. Stamina fertilia 2 vel 4 didynama adscendentia. Antheræ approximatæ uniloculares vel biloculares loculis divaricatis. Capsula bivalvis, loculicide dehiscens valvulis integris bifidisve vel septicide dehiscens valvulis bifidis, rarius indehiscens, dissepimento e marginibus valvularum inflexis duplicato solubili vel rarius concreto.

* Corolla ecalcarata breviter bisaccata. Capsula globosa.

7. Angelonia, *Humb. et Kunth.* Capsula loculicide dehiscens valvulis integris.

8. Phylacanthus, Nees et Mart. Capsula indehiscens.

9. Hemimeris, Linn. Capsula loculicide dehiscens septicide bipartibilis vel dehiscens. (Diascia, Link.)

** Corolla calcarata. Capsula compressa apice truncata.

10. Nemesia. Vent.

Tribus III. Antierrhineæ, Chavannes. Corolla tubulosa limbo personato vel ringente bilabiato rarius subæquali. Stamina fertilia 4 didynama. Antheræ per paria approximatæ biloculares. Capsula dentibus seu valvulis pluribus operculisve circumscissis dehiscens vel irregulariter rumpens. Semina nuda vel testa arilliformi inclusa.









PÆÓNIA Moutan; lacera.

Double-red curled Tree Pacony.

POLYANDRIA MONOGYNIA.

Nat. ord. RANUNCULACEE, Juss. (Introduction to the Natural System of Botany, p. 6.)

PÆONIA.—Supra, vol. 1. fol. 42.

GARDEN VARIETY.

Raised from the seed of Pæonia Moutan by Mr. William Hyland, Gardener to the Earl of Sandwich, at Hinchingbrook, near Huntingdon, and communicated to us by Michael Foster, Esq.

This very beautiful variety is strikingly different from the other Moutans in the bright rosy red of the petals, the innermost of which are very much cut and gashed, curled up, and distinctly bordered with a narrow edge of light carmine, which sets them off to great advantage, and gives the whole flower a peculiarly rich and finished appearance. Mr. Hyland informs us that the seed was sown in September, and did not germinate for eighteen months afterwards; and that he finds such to be the case with all the seeds he has sown of this kind of Pæony.

It flowered for the first time in April 1834, when the plant was only three years old. It may therefore be expected that the future blossoms will be still finer than what we have figured.







* ANGRÆCUM micranthum.

Small-flowered Angræcum.

GYNANDRIA MONANDRIA.

Nat. ord. Orchider § Vander, Lindl. (Introduction to the Natural System of Botany, p. 262.)

ANGRÆCUM.-Supra, vol. 18. fol. 1522.

A. micranthum; caule brevi, foliis oblongis trinerviis apice obliquis, spicis secundis multifloris horizontalibus congestis foliis brevioribus, sepalis petalisque subæqualibus angustè ovatis apice patulis, labello conformi basi bilobo bidentato medio pubescente, calcare obtuso incurvo postico.

Caulis 2-pollicaris. Folia $1\frac{1}{2}$ -p. longa, $1\frac{1}{2}$ -p. lata, plana, crassa. Flores minuti, albi.

A very small and unattractive species, lately introduced by Messrs. Loddiges from Sierra Leone. It is quite distinct from any previously described, but retains the peculiar characters of the genus without deviation. It flowered in February.

It is curious that Angræcum should be so exclusively an African genus, that no certain species has yet been found beyond its continent or immediately dependent islands, although it evidently stretches across the whole of the tropical part of Africa itself. In addition to this from Sierra Leone, three or four other species are now in our gardens from the same place, but all of them equally inconspicuous with the present. Of these A. clandestinum, teretifolium and distichum have already flowered with Messrs. Loddiges. Fig. 1. represents a lip with the spur attached; 2. an entire flower; and 3, a pair of pollen masses with their gland.

^{*} Sec folio 1522.







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* RUSSÉLIA juncea.

Rushy Russelia.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Scrophularineæ, Juss. Trib. 5. Digitaleæ, Bentham. (Introduction to the Natural System of Botany, p. 228.)

RUSSELIA, Jacq.—Corolla tubulosa recta limbo patente subbilabiata labio superiore emarginato vel bifido inferiore trifido laciniis omnibus subæqualibus planis. Stamina fertilia 4, basi declinata apice adscendentia, sterile nullum. Antheræ sub labio superiore approximatæ glabræ biloculares loculis demum divaricatis confluentibus. Stylus simplex stigmate integro parum incrassato. Semina nuda.—Frutices, ramis sæpius pendulis glabris. Folia opposita dentata vel integra. Flores nunc in racemis cymisve axillaribus dense glomerati nunc laxe racemosi pedunculis elongatis subunifloris. Corollæ sæpius coccineæ. Bentham MSS.

R. juncea; ramis tetragonis erectis junceis, foliis minimis petiolatis ovatis subintegris, pedunculis filiformibus subbifloris.

R. juncea. Zuccarini in litt.

Caulis plantæ 3-pedalis erectus, angulatus, viridis, ramis onustus gracillimis, tetragonis, pallidè viridibus, junioribus subaphyllis, nutantibus. Folia sæpe minima, semper parva, ramulis debilioribus majora, petiolata, ovata, acuta, subtiliter serrulato-ciliata, aliquando dente uno alterove munita. Inflorescentia primo adspectu paniculata, sed revera e ramulis racemosim dispositis, gracilibus, distantibus constans, quorum apice insident flos unus duove pedicellati et cernui. Calyx parvus sepalis 5 ovatis acutis imbricantibus. Corolla tubulosa, coccinea, unciam longa, sursum dilatata, limbo subæqualiter 5-fido; laciniis obtusis duabus superioribus magis approximatis. Stamina 4, didynama. Autheræ glabræ oblongæ, apiculatæ, lobis parallelis. Stigma bilobum; lobis oblongis planis.

A very pretty Greenhouse or Stove plant found in Mexico (probably near Oaxaca), by Count Karwinski, and lately introduced to the gardens of this country from

^{*} Named after Dr. Alexander Russel, an English Physician, who resided for some years at Aleppo, and published an account of his observations upon the Natural History of that place in the year 1756.

Berlin and Munich. We have specimens from Dr. von Martius under the name we have adopted, but we know not in what publication Professor Zuccarini has described the species.

It forms a tufted light green bush, about three feet high, almost destitute of leaves, but having a graceful appearance in consequence of the large number of its drooping slender twigs, which look like those of an Equisetum or a Casuarina, and which form a singular contrast with the handsome scarlet flowers that appear in abundance in the months of July and August.

Propagated very easily by cuttings.

We are indebted to Mr. Bentham for the amended character of the genus. Fig. 1. is a corolla cut open by dividing the lip through the middle; 2. is a stigma with its style; 3. a stamen.





* ERIÓGONUM compósitum.

Compound Eriogonum.

ENNEANDRIA TRIGYNIA.

Nat. ord. Polygoneæ, Juss. Trib. Eriogoneæ, Benth. in Linn. Trans. incd. (Introduction to the Natural System of Botany, p. 169.)

ERIOGONUM Michx .- Involucrum tubulosum campanulatum vel cyathiforme vix angulatum subæqualiter 6-dentatum, multiflorum. Receptaculum bracteolis intra pedicellos sæpe instructum. Flores hermaphroditi vel dioici. Perianthia exserta profunde 6-fida laciniis 3 exterioribus, 3 interioribus sæpe dissimilibus. Stamina 9 basi subcoalita. Ovarium triquetrum. Styli 3 filiformes. Stigmata terminalia tenuia vel parum incrassata capitata. Achenium triquetrum vel vix trialatum.—Herbæ suffruticesve sæpissime lanuginosæ. Folia caulina alterna ad basin caulis approximata cæspitosa vel secus ramos fasciculata exstipulata, petiolo basi dilatato sapius amplexicauli vel vaginante. Pedunculi vel rami floriferi terminales nunc simplices involucro solitario terminali sapius 2-3-chotome vel umbellatim ramosi, involucris solitariis glomeratisve, intra ramificationes, secus ramos vel ad apices sessilibus pedicellatisve. Bracteæ vel folia ramorum floralium sub ramificationibus orta tot quot rami vel (ramis abortientibus) numerosiora nunc minuta squamæformia, nunc herbacea et foliis caulinis difformia, sæpissime sessilia, exstipulata vel stipulis scariosis aucta. Bentham in Linn. Trans. ined.

§ 3. Umbellata, Benth. Folia omnia exstipulata. Genitalia pilosa, filamenta prope basin ovarii. Inflorescentia umbellata pedunculo (sæpe scapiformi) apice umbellam simplicem vel duplicem pluriradiatam nonnunquam in capitulum globosum contractam vel ad involucrum solitarium reductam gerente. Bentham l. c.

E. compositum (Dougl. MSS.) foliis ad basin caulis approximatis longe petiolatis ovatis basi rotundatis cordatisve supra demum glabratis subtus dense albolanatis, pedunculo longissimo nudo apice breviter biumbellato, involucris

breviter pedicellatis campanulatis multifloris. Bentham l. c.

Habitu et foliis E. latifolio affine, inflorescentia et floribus ad hanc sectionem referendum. Petioli basi vaginantes, extus villosissimi, 2-4-pollicares, limbo 1-1½-pollicari. Pedunculus scapiformis ultrapedalis, in exemplaribus cultis folio sæpe instructis. Bractæ sub radiis umbellæ lineares, oblongæ, vel (in exempl. cultis) dilatato-ovatæ. Radii umbellæ 1½-3-pollicares, umbellularum vix semipollicares, villosuli. Flores majores quam in E. latifolio. Genitalia minus pilosa quam in præcedentibus. Perianthia post anthesin aucta, laciniæ interiores elongatæ obovatæ, exteriores breviores latiores, marginibus membranaceis crispis. Bentham MSS.

^{* &}quot;Εριον wool, and γόνυ a joint; in allusion to the woolliness of the stems.

We are indebted to Mr. Bentham for the foregoing extracts from an unpublished paper read before the Linnean Society in May of the present year, and comprising the characters of several new genera, and species of this curious section of Polygoneæ.

The subject of the present article was found by Douglas on the rocky gravelly banks of rivers in New Albion.

It is a hardy herbaceous plant, forming a patch of neat dark green leaves which throw up in abundance, in May and June, their woolly scapes terminated by masses of yellowish white flowers. It thrives equally in peat earth, or common soil, best in a damp situation, and may be increased by cuttings of its well ripened shoots, struck in peat and sand in an almost exhausted hotbed.

We have illustrated the structure of this rare genus in more detail than can usually be afforded in a work so cheap as this. 1. Is a magnified view of a flower as seen externally. 2. Is a section to show the connection of the stamens at their base, and how they are placed by threes in face of the inner segments of the calyx. 3. An ovary with its recurved styles. 4. A fruit enveloped in the permanent calyx. 5. A ripe nut. 6. A seed taken from out of the latter. 7. A section of a seed to shew the position of the embryo in the albumen.





* CLÍANTHUS puniceus.

Crimson Glory-pea.

DIADELPHIA DECANDRIA.

Nat. ord. LEGUMINOSÆ § PAPILIONACEÆ, Juss. (Introduction to the

Natural System of Botany, p. 86.)

CLIANTHUS, Soland. Mss. in mus. Britt.—Calyx latè campanulatus, subæqualis, 5-dentatus. Vexillum acuminatum, reflexum, alis parallelis longius; carina scaphiformis, vexillo alisque multò longior, omninò monopetala. Stamina manifestè perigyna, diadelpha, omnia fertilia. Stylus staminibus duplò longior, versus apicem hinc leviter barbatus, stigmate simplicissimo. Legumen pedicellatum, coriaceum, acuminatum, ventricosum, polyspermum, intus lanulosum, suturà dorsali rectà ventrali convexà. Semina reniformia, funiculis longiusculis affixa.
—Suffrutices, Herbæve foliis impari-pinnatis stipulatis, floribus speciosissimis racemosis.

C. puniceus; suffruticosus diffusus glaber, foliolis alternis oblongis subemarginatis, racemis pendulis multifloris, calyce 5-dentato, legumine glabro.
C. puniceus, Soland. MSS. in mus. Britt. All. Cunn. in Hort. Trans. vol. 1.

n. s. p. 521. t. 22.

Donia punicea. Don's gen. syst. of gard. 2. p. 468.

Suffrutex diffusus, ramosus, 2-3-pedalis, omni pube orbatus nisi levissima in paginam inferiorem foliolorum juniorum et inflorescentiæ partes virides; ramis viridibus, parum lignosis. Folia 8-juga cum impare; foliolis oblongis obtusis subemarginatis alternis; stipulis viridibus ovatis, reflexis, foliolis multò minoribus. Racemi penduli, multiflori; axi flexuosa; bracteis angustè ovatis reflexis pedicellis bracteolatis filiformibus multò brevioribus. Calyx semi-quinquefidus, dentibus acuminatis. Vexillum ovato-lanceolatum, acuminatum reflexum 2-p. longum, atro-sanguineum versus basin albo interrupte vittatum, posticè roseum. Alæ atro-sanguineæ, obtusæ 1½-p. longæ. Carina omninò monopetala, acuminata, fere 3-p. longa, sanguineo-aurantiaca, basi pallida. Legumen ferè 3-p. longum, atro-fuscum, venosum. Semina reniformia, fusca, atro-nebulosa.

The only account that has yet been given of this most beautiful plant is in the last part of the Horticultural Transactions; where a figure is published from a specimen furnished by Mr. Levison Gower from his garden at Titsey, near Godstow. We are indebted to the same gentleman for the specimen from which our plate has been prepared.

It is a native of New Zealand, and, in the opinion of Mr. Allan Cunningham, probably to the southward of the Bay of Islands; and

^{*} From κλεῖος glory, and avθος a flower, in reference to the noble aspect of the species of this beautiful genus.

perhaps, on the shores of the River Thames, or at Mercury Bay. Its seeds were sent by the Missionaries under the name of Kowaingutu-haka, or Parrot's-bill; and were stated to be the produce of a large tree; but this was no doubt a mistake, as there is no reason to believe that the plant will grow more than three or four feet high.

We extract the following account of it from the Horticultural

Transactions.

"When planted in a peat border in the open air, where it succeeds the best, it forms a half-herbaceous evergreen shrub, not very unlike an evergreen Vetch, or more correctly speaking, a scarlet Colutea, (Sutherlandia frutescens). Its leaves are smooth, pinnated, and of rather a succulent texture, consisting of about eight pairs and an odd one. The stem is entirely free from furrows or angles, and is about as thick as a goose's quill. The flowers grow in oval clusters, hanging down from the axils of the leaves upon the lateral branches; each flower is rather more than three inches from the tip of the standard to the tip of the keel; the petals are of a light bright rich crimson, without any mottling or marking; the standard, which is of an ovate lanceolate figure, and much tapered to the point, is reflexed so as almost to lie back upon the calyx; the wings are very much shorter than the keel, the point of which is so much prolonged as to look like the beak of some bird, although it must be confessed not much like that of a parrot. The flowers are succeeded by brownish black pods, two inches and a half long, seated on a slender stipe, and convex on the upper instead of the lower edge: so that unless attention be paid to their manner of growth, it would seem as if the seeds grew to the lower instead of the upper edge. They are covered all over inside with a delicate cottony down, in which lie the small kidney-shaped seeds, of a dull vellowish-ochre colour, mottled with small dark brown blotches and speckles.

"From the trials that have been made of the proper mode of managing it, both by Mr. Gower and the Rev. John Coleman, by whom it was given to the former gentleman, it would appear that it succeeds best when treated as a hardy plant, and turned out into a peat border; for in such a situation it has now been two years in Mr. Gower's garden, and the plants continue to look very healthy, with a profusion of blossoms forming for next year. Kept in a greenhouse it was sickly, and did not flower in the hands of Mr. Gower's gardener; but Mr. Coleman succeeded in blossoming it in a large pot in the greenhouse, and in inducing

it to ripen its pods, one of which is that here figured.

"Considering that the climate of New Zealand is in some places so much like that of England, that some species, such as Edwardsia microphylla, will bear the rigour of our winters, it is not improbable that this may also prove a hardy plant. If so its extraordinary beauty will render it one of the most valuable species that has been introduced of late years; and even if it should be no hardier than Sutherlandia frutescens, it will still form one of the most important and welcome of all the modern additions to our flower gardens."

We refer our readers to the observations upon the other species made by Mr. Allan Cunningham in the place whence the foregoing passage has been extracted, for further information concerning these remarkable plants; adding only, that in the first place, the supposed attachment of the seeds to the lower suture of the pod, as' described by Mr. Don, is a mistake, their attachment being in *Clianthus* as in all other Leguminosæ, namely, to the upper suture; and in the second, that as we are not aware of any reason why Dr. Solander's well-known name, *Clianthus*, should have been changed to that of *Donia*, we have not felt authorized to sanction the innovation.





* COLLETIA horrida.

Bristling Colletia.

PENTANDRIA MONOGYNIA.

Nat. ord. Rhamneæ, Juss. (Introduction to the Natural System of Botany, $p.\ 113.$)

COLLETIA, Kunth.—Calyx campanulatus, membranaceus, coloratus. Petala O, v. minutissima, linearia. Stamina antheris ovatis bilocularibus v. reniformibus unilocularibus. Discus brevis, cupulæformis, fundo calycis adnatus. Ovarium liberum, triloculare. Stylus simplex, elongatus. Fructus basi calycis tubo persistente cinctus, tricoccus, dehiscens. Semina sessilia. Ad. Brong. in Ann. sc. nat. x. 365.

C. horrida; spinis rigidis simplicibus vel tri-multipartitis, pedunculis sub geminatis, calycibus ovato-oblongis, staminibus sessilibus.

C. horrida. Ad. Brong. l. c. an. Vent.?

C. ferox. Gill. & Hook. in Bot. Misc. 1. 154. t. 44. f. B.

Frutex ulicinus, atroviridis, rigidus, nudus aut leviter pubescens, aphyllus, vel in ramis vegetioribus parcè foliatus. Rami spinescentes nune omnino simplices, nunc tripartiti, sæpe multipartiti, validi et rigidi. Folia dum adsunt, minuta, ovata, serrata, atroviridia, glabra. Pedunculi sæpiùs geminati, nunc aggregati, sub anthesi nutantes, postea rigidi, ascendentes. Calyx ovato-oblongus, laciniis erectis, demum supra discum annularem revolutum transverse separabilis et deciduus. Stamina omninò sessilia. Ovarium superum, triloculare, ovulo unico erecto cuique loculo. Stylus 1. Stigmata 3, subcapitata.

A hardy evergreen shrub, with much the habit of a furze bush, like which it consists chiefly of strong spines of a deep green colour. The flowers, which are of a greenish white, stained with dull purple, are produced in some abundance at the ends of the shoots, and appear in May and June.

Leaves the plant has none when old; but its young branches are furnished with them in the form of opposite

^{*} Named by Commerson after one Mons. Collet, a French Botanist, who is said by Jussieu to have been a fierce opponent of the method of Tournefort.

bright green sawed scales, at the base of each of which is a small stipule. They however speedily fall off, leaving the branches to act as leaves by the aid of their soft parenchyma with which they are clothed in the form of bark.

A native of Chili and Mendoza, where it is probably common. It is by no means so handsome a species as the *C. spinosa* of the same country, whose branches are loaded with masses of white bloom which must have an exceedingly pretty effect.

It grows in common garden soil, and prefers a hot exposed dry situation, such as the foot of a south wall, without any kind of shade. We have not as yet heard of its having been propagated; but it is often raised from Chilian seeds, under the name of *Retanilla*.





* PHOLIDÓTA imbricáta.

Imbricated Pholidota.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Malaxideæ. (Introduction to the Natural System of Botany, p. 262.)

PHOLIDOTA.—Supra, vol. 14. fol. 1213.

P. imbricata; pseudobulbis oblongis corrugato-sulcatis obtusis, foliis solitariis oblongo-lanceolatis plicatis acutis, spicis pendulis foliorum longitudine, bracteis membranaceis concavis acutis, sepalis lateralibus ovatis carinatis, labello subgloboso cucullato: lobis lateralibus parvis erectis intermedio bilobo: laciniis rotundatis.

P. imbricata. Lindl. in Hook. Exot. Fl. t. 138. Loddiges Bot. Cab. t. 1934.

It appears that there are two different species confounded under the name of *Ph. imbricata*; namely, this one and that which is figured at fol. 1213 of this work.

So long a time has elapsed since we saw the latter in flower that we are scarcely able to point out any very satisfactory characters to distinguish them, although we have no difficulty in acceding to the opinion of cultivators that they are in fact entirely distinct. We therefore propose to call *Ph. pallida* the plant before figured by the name of *Ph. imbricata*, and to retain the latter designation for this, which was originally figured by Dr. Hooker in the Exotic Flora, and afterwards by Messrs. Loddiges in their Botanical Cabinet.

They are both natives of India, and possibly occupy

^{*} See fol. 1213.

similar regions; they principally differ in the following particulars. *P. pallida* has very round blunt bracts, white flowers, smaller leaves, and grows very weakly and unwillingly under ordinary circumstances. *P. imbricata* has pointed bracts, yellowish flowers with a dash of violet, very long strong leaves, and grows and flowers most freely.

Our specimens were communicated by Richard Harrison, Esq., in May, 1834.





* MYÁNTHUS barbátus.

Bearded Flywort.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ §. Vandeæ. (Introduction to the Natural System of Botany, p. 262.)

MYANTHUS.—Supra, vol. 1. fol. 1538.

M. barbatus; labello in pilis succulentis barbæformibus dissoluto basi supra unicorni.

Caules vetusti fusiformi-cylindracei, 4-5-poll. longi, parum induviati, luteo-olivacei. Folia atroviridia, undulata, Cataseti, oblongo-lanceolata, versus basin angustata. Racemus radicalis, prostratus vel pendulus, flores 9-10 inversos, i. e. labello quoad axin superiore gerens. Bracteæ linearilanceolatæ membranaceæ, pedicellis purpurascentibus breviores. Perianthium bilabiatum; sepalis petalisque lineari-lanceolatis, herbaceis, fusco-sanguineo maculatis. Sepalum supremum, cum petalis in galeam agglutinatum; lateralia patentissima. Labellum cum columna subarticulatum, lineare, medio infractum et saccatum; margine in fila tenuia alba numerosissima dissoluto, cristam aviculæ cujusdam simulantia; cornu deorsum falcatum, candidum, basi superiore tridentatum gerens. Columna herbacea, fusco-sanguineo maculata, cornu apicis galeæ longitudine, cirrhis duabus rectis purpurascentibus apice pellucidis cornu labelli amplectentibus. Glandula maxima, cartilaginea, oblonga, stigmate cum vi elastica dissiliens, et convoluta.

This curious new species is a native of Demerara, near the falls of Wapopekai on the Massarony river, some hundreds of miles from its mouth, where it was found by Mr. John Henchman growing in the clefts of trees in shady situations. It was first sent us in February last by Mr. Lowe, with whom it first flowered, but almost immediately after we received it from Chatsworth, and from the garden of Mr. Willmore, of Oldford, near Birmingham. The

^{*} See folio 1721.

first specimens were pallid, as if they had suffered from want of light, but Mr. Willmore's were much darker. In the latter the sepals were of a deep green spotted with purple, the petals were a deep rich brownish red; and the lip itself, with its innumerable thread-like feelers, was tinged with red in all parts, except a strong white horn, which stands upon it near its base, curving downwards towards the little pit which occupies the centre of the lip.

This plant has altogether the habit of Catasetum, and no doubt requires the same sort of management.









* DENDRÓBIUM cúpreum.

Copper-coloured Dendrobium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ §. Malaxideæ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

DENDROBIUM.—Supra, vol. 7. fol. 548.

D. cupreum; caulibus teretibus pendulis, foliis oblongis obtusis emarginatis, racemis lateralibus laxis multifloris, bracteis ovato-linearibus canaliculatis obtusis, sepalis ovatis obtusiusculis petalis oblongis explanatis obtusis minoribus, labello unguiculato cochleariformi obtusissimo extus villoso intus nudo.
D. cupreum. Herb. MSS.

A native of the East Indies, whence it was sent by Dr. Wallich to the Hon. and Rev. W. Herbert, about the year 1825. It flowered at Spofforth for the first time at Midsummer 1834, when the drawing was made by Mr. Herbert, which we have now the opportunity of publishing.

It has been suspected that there are two Dendrobia in the East Indies, which agree with each other in a sort of tessellated appearance of the flowers, and a remarkably inflated slipper-like hairy labellum; one of these, called *D. moschatum*, has pale orange coloured blossoms, and a lip with 5 crested veins near its base; the other, to which the name of *D. Calceolaria* has been applied by Dr. Hooker, has rose coloured flowers with a little yellow in the centre, and is said to be destitute of the crested veins of the lip. There is, moreover, a *D. clavatum* of Dr. Wallich's Indian Catalogue, the specimens that were distributed of which

^{*} See folio 1239.

were too imperfect to be described in the Genera and Species of Orchideous plants; but whether this plant is one of the preceding, or something altogether distinct is unknown. Furthermore, the plant now represented belongs to the same little cluster, and appears as if it might form a fourth species, unless indeed it should prove to be this D. clavatum. We have had no opportunity of examining it, but Mr. Herbert describes it to us in such a manner as to shew that it must be different from D. Calceolaria at least. flowers are of a pale copper colour, veined with a redder tinge, and have two brown red blotches inside the lip. The spike of ten large flowers all expanded simultaneously, and the progress was so rapid that only about a week or ten days elapsed between its shewing bud and bursting into bloom. Independently of the colour of the flowers this species differs from D. Calceolaria in not having such long and in having the leaves less attenuated and shorter. D. Calceolaria under the same treatment makes shoots above four feet long; this plant under three feet. It is curious that these Dendrobiums if they miss flowering put forth a young plant instead of a spike of flowers at the point of inflorescence, as D. Calceolaria is doing here now."





* LASTHÉNIA glabráta.

Smooth Lasthenia.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. Composite. (Introduction to the Natural System of Botany, p. 197.)

LASTHENIA, De Cand. MSS.—Involucrum monophyllum, multidentatum, ebracteatum. Receptaculum conicum, scrobiculatum. Flosculi radii fæminei ligulati; disci hermaphroditi infundibulares. Antheræ apice appendiculatæ, basi muticæ. Stigmata rhombeolanceolata ad angulos barbata. Pappus O. Achenia compressa, lævia, apice disco brevi semicylindraceo mucronata.

L. glabrata, glaberrima; foliis subdentatis, involucris turbinatis.

Herba annua, insipida, diffusa, glabrata, imò lucida, foliis oppositis a basi sub-amplexicauli acuminatis, subsucculentis, nunc integerrimis, nunc dentatis. Capitula majora quam in L. californica, flosculis magis vitellinis. Ligulæ oblongæ bidentatæ. Flosculi disci valde glandulosi. Achenia atra lævigata.

A new hardy annual, native of California, whence it was introduced by the Horticultural Society in 1834. It flowers in May and June, if sown very early in the spring or in the previous autumn, and forms a pretty gay mass of yellow in the beds of the flower garden. It seeds profusely.

The characters of the genus Lasthenia have not yet been published; the name is employed in the manuscripts, of Professor De Candolle for another species,† which is also in our gardens, but which is rather less ornamental than the present.

^{*} An unexplained manuscript name of Professor De Candolle.

⁺ L. californica (De Cand.) subpubescens; foliis integerrimis, capitulis basi umbonatis.







Lake diet.

The Feder on My Boxelly Aug. 1 835

- Walts. s.

*ANGRÆCUM dístichum.

Two-rowed Angræcum.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ § Vandeæ. (Introduction to the Natural System of Botany, p. 262.)

ANGRÆCUM.—Supra, vol. 18. fol. 1522.

A. distichum; caule imbricato, foliis distichis compressis recurvis obtusis supra canaliculatis, floribus solitariis axillaribus pedunculis foliis subrequalibus, sepalis ovatis petalisque angustioribus secundis obtusis, labello postica oblongo concavo apice tridentato calcare tereti horizontali pedunculo breviore.

Caules 3-4 pollices longi, atrovirides, foliis densissimè imbricati. Flores parvi, lactei, carnosi, inodori. Labelli dentes laterales rotundati intermedio recto acuto.

A remarkably neat and pretty looking species, on account of its small closely packed deep bright green leaves and tufted stems, but having no beauty of a striking nature in its flowers.

It is a native of Sierra Leone, where it is found on the bark of trees. Imported by Messrs. Loddiges, in whose Nursery our drawing was made in October last. It appears to grow freely in the damp hot atmosphere which so many similar plants delight in.

^{*} See folio 1522.







* DÝCKIA rariflóra.

Scattered-flowered Dyckia.

HEXANDRIA TRIGYNIA.

Nat. ord. Bromeliaceæ, Juss. (Introduction to the Natural System of Botany, p. 256.)

DYCKIA.—Schultes fil. Calyx tripartitus; laciniis erectis concavis. Corolla urceolato-campanulata; petalis erectis rhomboideis carnosis basi nudis. Stamina basi monadelpha; antheris erectis. Ovarium superum, tripartibile, polyspermum; stylis tribus stigmatibusque totidem dilatatis complicatis fimbriatis; ovula disticha.—Folia carnosa, epidermide crassa corned paululum lepidota vestita, margine spinosa.

D. rariflora; foliis lineari-lanceolatis recurvo-patentibus, spicâ rariflorâ, spathis scapi ciliolato-serrulatis, floralibus calycem acutiusculum subæquantibus. Schultes fil. in Rom. et Sch. Syst. veg. v. 7. p. 1195. Graham in Jameson's Journal, July, 1835, p. 202.

Introduced from the Berlin Garden by the Horticultural Society in 1833. This plant is a native of the Serra of Villa Rica, in Brazil, where it and two more species were discovered by the indefatigable travellers Spix and Martius. It flowers in June and propagates very slowly by offsets, after the manner of an Aloe, with which it agrees in many of its habits.

^{*} Named in compliment to his Highness the Prince of Salm—Reifferscheid-Dyck, a great lover of Gardening, and one of the most liberal and intelligent of the noble patrons of science of the present day.

The dry stove seems to suit it, for there it produces its rich orange flowers in great perfection, and retains them in all their freshness and beauty for several weeks.

We do not understand upon what principle this genus is referred to the Linnæan *Hexandria Monogynia*, instead of *Trigynia*, for it unquestionably has 3 distinct styles; unless it is to be considered a new case of the necessity of understanding the natural affinities of plants in order to use the sexual system.

Few persons, when they look at the leaves of a plant, ever think of the curious internal mechanism by which all its vital actions are put and maintained in motion; and yet there is not in the whole range of the creation a more singular object than a leaf, nor one whose structure is a more admirable instance of design and forethought. internal anatomy in this species is highly curious and very easily examined. It consists as usual of a quantity of cellular matter enclosed in a cuticle, but the arrangement of the parts, which is most uncommon, is probably connected with the habits of life of the species in its native wildernesses. The cuticle is hard and composed on the upper surface of three, and on the lower of five layers of extremely minute compact cubical cells. The leaf itself is plane above and convex below; corresponding with the convexity is a stratum of equal thickness of dodecahedral cells, which are green, and pierced towards their upper side by the parallel veins of the leaf; above this structure is a very thick planoconvex bed of hard prismatical cells, which are planted nearly perpendicularly below the cuticle; so that when the section of the leaf is viewed by the naked eye it appears, as is

indicated in our figure, as if it consisted of a common thin channelled leaf, whose concavity is filled up by cartilaginous matter. It is also worthy of remark, that in the lower stratum the tissue below each vein is much more lax and cavernous than that which is interspersed between the veins. The stomates are small and imperfect, and occupy a double or triple line in each furrow, lying concealed among the scurfiness.







* EMPÉTRUM rúbrum.

Red Crowberry.

DIŒCIA TRIANDRIA.

Nat. ord. Empetreæ, Nuttall. (Introduction to the Natural System of Botany, p. 109.)

EMPETRUM, L. & Squamæ imbricatæ, quarum tres interiores petaloideæ. Stamina 3. & Squamæ maris. Ovarium 6-9-loculare; ovulis solitariis ascendentibus. Stigma sessile, radiis plicatis tot quot loculi. Pericarpium baccatum, seminibus osseis.

E. rubrum; ramulis foliisque margine lanulosis.

E. rubrum. Willd. sp. pl. 4. 713.

Suffrutex sempervirens, virgatus, procumbens, visu subcinereo. Rami purpurascentes, graciles, ramosi, laná laxá intricatá vestiti. Folia linearia, 3 lineas longa, petiolata, marginibus veris reflexis in medio dorsi attingentibus, spuriis laná ciliatis. Flores axillares, solitarii; masculi e squamis constantes imbricatis, circiter novem, quarum 3 interiores corollæ formam induunt et sub aspectu petalorum trium linearium cuneatorum, fusco-purpureorum, apice reflexorum se expandunt. Stamina 3; antheris oblongis 2-locularibus in filamenta debilia vacillantibus. Rudimentum ovarii. Fæminei maribus sunt similes, sed omninò anandri. Ovarium sphæricum, 9-loculare. Stigma sessile, fusco-purpureum, radiis novem plicatis stellam referentibus.

A hardy evergreen shrub, lately introduced by Mr. Low of the Clapton Nursery, under the name of "the Cranberry of Staten Island."

It is a plant that is found all over the Southern point of South America, growing with *Pernettia mucronata* along the sandy coast, spreading over the stones, but especially thriving at the back of the low sandhills, by which the shore

^{*} From $\epsilon \nu$ in, and $\pi \epsilon \tau \rho o c$ a stone, in allusion to the rocky places it grows among.

is often skirted. It is, however, by no means confined to this locality, for we have specimens of it collected at Conception by Macrae. According to Gaudichaud the red berries are pleasant to eat.

It grows freely in peat among other plants of a similar kind, and appears perfectly hardy. We have hitherto seen only fertile individuals alive, but in all probability sterile ones exist somewhere in collections, and if so we may soon expect to see its fruit.

Although not striking in its appearance, it forms an interesting addition to the hardy shrubs of this country.



Fub by I wagway 154 Twadelly Lug. 7 1835.

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* EUTÓCA diváricata.

Straggling Eutoca.

PENTANDRIA MONOGYNIA.

Nat. ord. Hydrophyller, R. Br. (Introduction to the Natural System of Botany, p. 244.)

EUTOCA.—Supra, fol. 1180.

E. divaricata; caulibus dichotomo-divaricatis, foliis omnibus ovatis indivisis, placentis 12-20-ovulatis. Bentham in Trans. Linn. soc. vol. 17. p. 278.

Annua. Caulis decumbens, fragilis, pilosus. Folia indivisa, pilosa, petiolata, oblonga, obtusa. Pedunculi axillares, foliis longiores. Corolla calyce parum longior, subcampanulata limbo plano; plicis decem tubi squamularum loco. Stamina exsertu. Ovarium ovatum, hispidum; stylo filiformi hispido, apice furcato. Capsula calyce acuto inclusa, ovata, acuta, compressa, pilis rigidis hispida; unilocularis, bivalvis; valvulis intus nitidis medio placentam corrugatam polyspermam gerentibus. Semina plurima abortiva; matura ovalia, compressa, subtriangularia, scrobiculata; embryone tereti in axi albuminis cornei.

A Californian annual of no great beauty, flowering in May and June. Its seeds should be sown in August in a situation neither overshaded, nor too much exposed to the sun; the young plants should not be allowed to stand nearer than four or five inches, and they should be kept carefully cleared of weeds; if this is not attended to, the branches will become so weak and brittle that they will not bear the water. Taking these precautions the flowers will be obtained in the spring, before the summer heats set in, and the seeds will ripen just when the season has become too dry to sustain the vegetation of the species.

The light violet blossoms are pretty in bouquets, but are hardly of more than Botanical interest.

^{*} See folio 1180.







* GESNÉRA fauciális.

Wide-mouthed Gesnera.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Gennera, Richard. (Introduction to the Natural System of Botany, p. 227.)

GESNERA.—Suprà, fol. 4. fol. 329.

G. fuucialis; herbacea, foliis sub-sessilibus cordatis oblongis acutis crenatis rugosis tomentosis, racemo terminali, bracteis ovatis acutis reflexis, corollis tomentosis labio superiore oblongo bilobo basi angustato inferiore minimo revoluto fauce latissimâ truncatâ.

Communicated in July 1834, by the Hon. and Rev. W. Herbert, who received it from Mr. Tate. It is no doubt a native of Brazil, and is nearly related to G. Selloi, from which, however, it differs in many respects, especially in the great depth of the throat of the corolla from back to front, and in the narrow base of the upper lip.

Mr. Herbert considers it by far the finest of the genus, but he can only distinguish it by the size, brilliancy, and paucity of its flowers, from *G. bulbosa*, though it eclipses it. It is equally hardy, and thrives in the greenhouse, if not damp in the winter.

^{*} See folio 1158.

Its very large flowers, with their segments bent back almost to their base, distinguish this at first sight from the other American species.

Beautiful as it is this cannot be compared with an unpublished species from the same country, which we possess from Mr. Douglas; and which is most remarkable for having an irregularly branched scape. This may be named and characterised as follows:—

Erythronium giganteum; foliis oblongis lanceolatisve, scapo irregulariter ramoso 5-floro foliis duplò longiore, foliolis perianthii acuminatis medio reflexis, stigmate 3-lobo.









10.5

* ERYTHRÓNIUM grandiflórum.

Large American Dog's-tooth Violet.

HEXANDRIA MONOGYNIA.

Nat. ord. Liliaceæ, Juss. (Introduction to the Natural System of Botany, p. 279.)

ER YTHRONIUM, L.—Perianthium hexaphyllum, campanulatum, foliolis reflexis: petalis basi bituberculatis. Stamina hypogyna, tria longiora. Stylus trigonus. Stigma 3-lobum v. 3-sulcatum. Capsula polysperma, loculicidotrivalvis. Semina ovata.—Folia radicalia, gemina; flores speciosi; scapi sæpius uniflori, nunc ramosi.

E. grandiflorum; foliis oblongo-lanceolatis subcomplicatis obtusis, perianthii laciniis ovato-lanceolatis acuminatis fere ab imâ basi reflexis, stigmate tripartito.

E. grandiflorum. Pursh. fl. am. sept. 1. 231.

Species Erythroniis alteris americanis affinis sed valdè distincta. Ab americano vulgari et Nuttalliano differt foliis concavis impunctatis et stigmate tripartito; ab albido formá foliolorum perianthii diversissimá et stigmate altiùs trifido; ab omnibus floribus duplò majoribus intensiùs luteis, foliolis ab imá basi ferè reflexis.

Of this extremely rare plant, a single bulb was received by the Horticultural Society from North West America eight or nine years ago; it has continued to grow slowly in a peat border, and at last put forth its beautiful flowers last May. It has not however produced any seed, and it will probably be many years before it can possibly be distributed.

Mr. Douglas, who discovered it, considered it the Erythronium grandiflorum of Pursh; and we adopt his opinion, although we confess ourselves unable to reconcile with it the statement by that writer, that his plant has linear-lanceolate leaves.

^{*} The common Dog's-tooth violet was the σατύριον ἐρυθρόνιον, or red Satyrion, of Dioscorides, and hence the latter word has been adopted by the moderns.

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*ONCÍDIUM pulchellum.

Pretty Oncidium.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEÆ, Juss. § VANDEÆ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

ONCIDIUM.—Suprà, vol. 13. fol. 1050.

§. 2. Folia triquetra v. teretia.

- O. pulchellum; foliis acutè triquetris carinatis subfalcatis integris, scapo confertissime multifloro subcernuo, sepalis cymbiformibus acuminatis lateralibus connatis, petalis ovatis undulatis acutis, labelli lobis lateralibus rotundatis intermedio subrotundo sessili retuso v. emarginato subæqualibus, cristâ trilobâ anticè 1-callosâ, alis columnæ acinaciformibus denticulatis.
- O. pulchellum. Hooker in Bot. Mag. t. 2773. Lindl. Gen. & Sp. Orch. p. 206. Lodd. Bot. Cab. t. 1984.

A beautiful species found in several parts of the West Indies, and probably mistaken for *O. variegatum* till Dr. Hooker distinguished it. When in flower its panicle is so loaded with white blossoms tinged with yellow and pink as to be weighed down with their profusion.

It requires the treatment usually given to its tribe.

^{*} See folio 1542.







* AZARA dentáta.

Toothed Azara.

POLYANDRIA MONOGYNIA.

Nat. ord. Bixineæ, Kunth. (Introduction to the Natural System of Botany, p. 152.)

AZARA, Ruiz et Pav. Cal. 4-6-partitus. Petala O. Stamina plurima filamentis filiformibus liberis. Antheræ biloculares. Ovarium 1-loculare, placentis tribus polyspermis parietalibus; stigma indivisum. Bacca stylo apiculata, 1-locularis, polysperma. — Frutices Chilenses. Stipulæ nullæ, v. aliquando solitariæ folium parvum mentientes. Flores fragrantes.

A. dentata; ramis pubescentibus, foliis oblongis glabris nitidis crenato-serratis, stipulis rotundis, racemis corymbosis foliis brevioribus, staminibus calyce parum longioribus.

A. dentata. Ruiz et Pavon. Fl. Peruv. syst. p. 138.

A common shrub in the woods near Conception in Chile, also frequent near Valparaiso.

In this country it forms a very handsome evergreen bush, with remarkably glossy deep bright green leaves. It appears quite hardy if nailed to a wall and protected from wet in winter, but it will not bear the winters near London under other circumstances. No drought seems to affect it; for at the time we are writing, after nearly two months of the hottest and driest weather known in England, on the face of a south wall, the leaves of this plant are perfectly fresh and green.

It may be increased by cuttings, but layers are preferable.

^{*} Named after Joseph Nicolas Azara, a Spanish Gentleman, of whom nothing further is known, except that he was a patron of science.







* ONCÍDIUM Lemoniánum.

Sir C. Lemon's Oncidium.

GYNANDRIA MONANDRIA.

Nat. Ord. Orchider, Juss. § Vander, Lindl. (Introduction to the Natural System of Botany, p. 262.)

ONCIDIUM.—Suprà, vol. 13. fol. 1050.

§ 2. Folia triquetra v. teretia.

O. Lemonianum; foliis compressis acuminatis suprà sulcatis, scapo stricto paucifloro, scpalis parvis spatulatis apiculatis omnibus liberis, petalis oblongis undulatis, labelli laciniis lateralibus linearibus abbreviatis intermediâ maximâ reniformi bilobâ: lobis dentatis ungue brevi margine denticulato, columnæ alis subquadratis truncatis oblique unidentatis.

"This curious little epiphyte was among a collection imported from the Havannah in March last, by Capt. Sutton of Flushing near Falmouth, and by him presented to Sir Charles Lemon, Bart., M. P., in whose garden at Carclew it flowered in May. It appears to us to be totally different from any species hitherto noticed, and is readily distinguished by its peculiar foliage."

"Pseudobulbs very small, scarcely discernible, roundish, one-leaved. Leaves from one to three inches long, and about a quarter of an inch broad, dagger-shaped, two-sided or edged, and sharp at the point; pale green, slightly striated, and covered with a profusion of minute, roughish, pale dots or warts. Scape about 9 inches high, round and slender, nearly erect, and in our specimen 5-flowered. Its colour is a pale brownish green, unless at the joints where it is a

^{*} Sce folio 1542.

dark brown. Sepals yellowish, marked along the back with reddish spots. The upper one which rises erect is spathulate, and appears to have generally 2 spots on the inside behind the column. The two lower ones are small and acuminate. Labellum bright yellow, beautifully spotted. The lower division is crescent-shaped, two-lobed, slightly unguiculate and fringed at the outer edge. The upper divisions are panduriform and of the same colour as the lower, but without the spots. The centre is tuberculated and ciliated on each side. Column deep yellow, with comparatively large spreading wings."

For the previous note we are indebted to Mr. Booth, under whose successful management this and several other curious new Orchideous plants have been raised at Carclew. The species is nearly allied to O. Cebolleta, from which, however, its characters abundantly distinguish it.





* KENNÉDYA Marryattæ.

Mrs. Marryat's Kennedya.

DIADELPHIA DECANDRIA.

Nat. Ord. Leguminosæ, Juss. (Introduction to the Natural System of Botany, p. 86.)

KENNEDYA.-Suprà, vol. 11. fol. 944.

§ 1. Foliis trifoliolatis, carina recta vexillo sublongiore, De Cand.

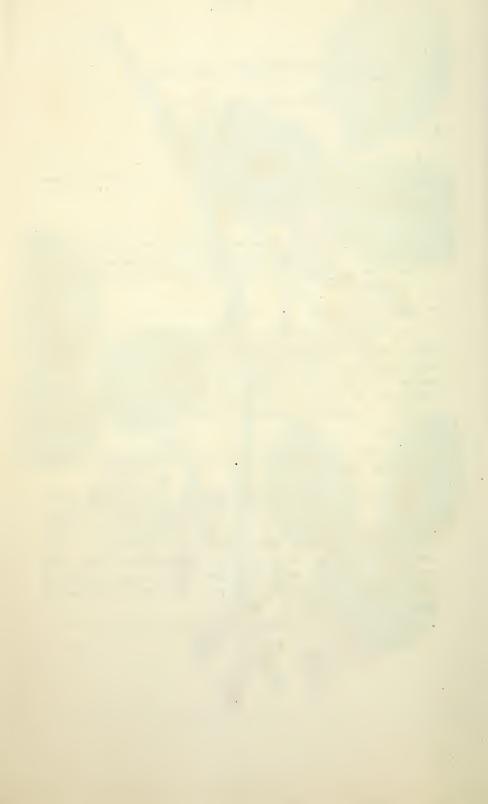
K. Marryattæ; foliolis tribus oblongis obtusis undulatis petiolo brevioribus, junioribus caulibusque villosissimis, stipulis bracteisque cordatis apiculatis, pedunculis 4-floris.

A beautiful greenhouse climber, obtained from Swan River seeds sent home by Sir James Stirling. Our first specimens were communicated by Mrs. Marryat, we afterwards received others from the garden of Mr. Robert Mangles. It flowers abundantly from April to July, producing a striking appearance with its numerous scarlet blossoms.

As it is easily propagated by cuttings it will soon become a common plant.

Different as this is from K. prostrata it is not easy to fix upon any very decisive mark of distinction. It is much larger in all its parts, and very much more hairy; in fact its young leaves and stems are perfectly shaggy. The leaflets are larger, far more wavy, and shorter than their stalk. The flowers grow about four in a cluster, instead of two, or being altogether solitary. The fruit we have not seen.

^{*} See folio 1421.







* ARCTOSTÁPHYLOS tomentósa.

Downy Bearberry.

DECANDRIA MONOGYNIA.

Nat. ord. Ericex, Juss. (Introduction to the Natural System of Botany, p. 182.)

ARCTOSTAPHYLOS, Adanson. Omnia Arbuti, sed Drupa lævis, composita, putamine pluriloculari, loculis monospermis.——Frutices.

A. tomentosa; ramis tomentosis sæpius setoso-hispidis, foliis ovatis acutis coriaceis junioribus tomentosis, racemis brevibus compositis, bracteis inferioribus herbaceis linearibus racemosis, fructu depresso.

Arbutus tomentosa. Pursh. fl. amer. sept. 1. 282. Hooker & Arnott in Beech.

Voy. 1. 144.

a. hispida; ramis setoso-hispidis tomentosis. Hooker Fl. Bor. Am. 2. t. 130.
 f. 1. Bot. Mag. t. 3320.

β. nuda; ramis tomentosis. Hooker l. c. f. 4.

A curious and very rare hardy evergreen shrub, native of rocky places on the west side of North America, from Puget's Sound in the north to California and the Mexican mountains in the south.

It requires to be cultivated in peat and loam, and in a sheltered situation, when it flowers in March; Dr. Hooker informs us that at Glasgow it is kept in the greenhouse. Our specimens were obligingly communicated from the very select collection of William Harrison, Esq., of Cheshunt, where it has been kept in the open air for about four years, and where alone it has as yet flowered in England.

We quite agree with Dr. Hooker in considering the plant which occurs without any bristly hairs upon its branches as a mere variety of this. But we possess two others, like it in habit, which it is

important to distinguish. These are

1. Arctostaphylos cordifolia; ramis tomentosis, foliis oblongis obtusis subcordatis coriaceis subtus tomentosis supra nitidis, racemis brevibus compositis, bracteis inferioribus foliaceis oblongis coriaceis racemi longitudine, fructu . . .

On the north-west coast of America, Mr. Menzies.

2. Arctostaphylos glauca; glabra, glauca, foliis ovato-oblongis acutis coriaceis basi obtusissimis, racemis brevibus compositis, bracteis inferioribus squamæformibus, fructu ovato.

California, Douglas.

There are no plants more general favourites among Collectors than the species of this Natural Order Ericeæ, beginning with Heaths at one end of the series and passing through Andromedas, Vacciniums and Azaleas to Kalmias and Rhododendrons at the other. It is, however, very remarkable, that notwithstanding the extensive commerce of England, the zeal of her merchants, and the enterprize of

^{*} The English name Bear-berry, or Bear-grape, is a literal translation of the Greek words of which this name is composed.

they are much smaller and more pointed. Petioles short, with a deep groove on the upper side. Flowers stalked, loosely panicled and spirally arranged, 7, 10, or more in each panicle. Calyx 5-parted. Sepals very small, stellate, adpressed. Corolla divided rather more than half its length, slightly campanulate, and nearly an inch in diameter. When fully expanded it is stellate, and measures about $1\frac{1}{4}$ inch from point to point of the opposite segments, which are somewhat cordate, acuminate, and exceed a quarter of an inch in breath. Outwardly they are of a pale silvery colour, but inwardly of a deep purplish red, at the point becoming paler and spotted towards the centre of the flower, in which as in others of this Natural Order there is a curious formation, angular at the top, secreting the parts of fructification, and supported by five pale, purplish-tinged, rounded, bracket-like processes. These latter and the divisions of the calvx point in one direction, being placed alternate with the petals and angular part of the centre which point in another. At the extremity of each of the angles is a small aperture, which on being enlarged and having the film removed exhibits two obovate, transparent, greenish yellow bodies, like the pollen masses of Orchideous plants.

"The flowers are produced in succession for several weeks. In the shade, or when the plant is in a room, they are scentless, but in sunshine, or a warm atmosphere, they are highly fragrant."

Mr. Booth has favoured us with the foregoing account and the drawing that illustrates it. The plant is no doubt the Beid el sar of Prosper Alpinus, and appears to extend across the whole of the north of Africa, even into Persia, following it may be supposed the desert region till it stops to the westward of Delhi. Alpinus says its juice, which is extremely acrid, was administered successfully as a remedy for ringworm and other cutaneous affections; and that it is also a powerful agent in removing hair from skin.





* CALOTRÓPIS procéra.

Tall Calotropis.

PENTANDRIA DIGYNIA.

Nat. Ord. Asclepiadež, R. Br. (Introduction to the Natural System of Botany, p. 210.)

CALOTROPIS.—Suprà, vol. 1. fol. 58.

C. procera; corollæ laciniis patulis. R. Br. in Hort. Kew. ed. 2, 2, 78. Asclepias procera. Hort. Kew. 1, 305. Willd. sp. pl. 1, 1263. Asclepias gigantea. Andr. Reposit. t. 271. Beidelsar. Prosp. Alp. ægypt. cap. 25. c. iv.

- "This plant was raised in the garden of Sir Charles Lemon, Bart., M. P., at Carclew, in June 1832, from seeds collected by Lieut. James Sulivan, R. N., at Porto Praya, St. Jago. In the note which accompanied the seed it is described as being "a shrub or small tree growing from 10 to 20 feet high, and flowering in clusters at the ends of the branches. Leaves six inches long. Pod about the size of the leaf, called by the natives calmady." With us it appears to be a tender, lactescent, upright growing, deciduous shrub, requiring the constant heat of the stove, and thriving in a soil composed of sandy loam, and decayed vegetable earth. It flowered in April.
- "Stem round, pale green, and together with the leaves thickly covered with hoary pubescence which rubs off on being touched. Leaves opposite, decussate, spreading, those of the stem obovate, acuminate, about five inches long and two and a half inches broad. At the extremity of the shoots

^{*} Literally "beautifully twisted," apparently in reference to the corolla of C. gigantea.

they are much smaller and more pointed. Petioles short, with a deep groove on the upper side. Flowers stalked, loosely panicled and spirally arranged, 7, 10, or more in each panicle. Calyx 5-parted. Sepals very small, stellate, adpressed. Corolla divided rather more than half its length, slightly campanulate, and nearly an inch in diameter. When fully expanded it is stellate, and measures about 14 inch from point to point of the opposite segments, which are somewhat cordate, acuminate, and exceed a quarter of an inch in breath. Outwardly they are of a pale silvery colour, but inwardly of a deep purplish red, at the point becoming paler and spotted towards the centre of the flower, in which as in others of this Natural Order there is a curious formation, angular at the top, secreting the parts of fructification, and supported by five pale, purplish-tinged, rounded, bracket-like processes. These latter and the divisions of the calvx point in one direction, being placed alternate with the petals and angular part of the centre which point in another. At the extremity of each of the angles is a small aperture, which on being enlarged and having the film removed exhibits two obovate, transparent, greenish yellow bodies, like the pollen masses of Orchideous plants.

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* CORYANTHES maculáta.

Spotted Coryanthes.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEÆ, § VANDEÆ, Lindl. (Introduction to the Natural

System of Botany, p. 262.)

CORYANTHES, Hooker. Perianthium patentissimum. Sepala dilatata, flexuosa, conduplicata; lateralibus maximis, basi distinctis. Petala multo minora, erecta. Labellum unguiculatum, maximum, galeatum, cum basi columnæ continuum, nullo modo articulatum, tridentatum, in medio unguis appendice poculiformi circumdatum. Columna teres, basi bicornis, elongata, apice recurva, bialata. Stigma rima transversa. Anthera bilocularis. Pollinia 2, compressa, posticè sulcata, caudiculà lineari arcuatà, glandulà lunatà apicibus approximatorecurvis.—Herbæ epiphytæ, pseudo-bulbosæ. Folia striata. Racemi penduli. Flores maximi. Lindl. Gen. et Sp. Orch. 159.

C. maculata; foliis lato-lanceolatis, sepalis lateralibus semicordatis rectis, labello intùs purpureo maculato cornubus elongatis.

C. maculata. Hooker Bot. Mag. t. 3102. Lindl. l. c.

Sepala membranacea, tenuia, citò flaccida, supremum lanceolatum acuminatum undulatum, lateralia maxima (2½-pollicaria) libera, basi angusta, semicordata, primùm explanata vespertilionis alarum more, dein flaccida. Petala lanceolata undulata flexuosa in labelli galeam prona. Labellum carnosum, 2½ poll. longum, unguiculatum, luteo purpureoque variegatum; hypochilio dilatato lateribus inflexis galeato extus rotundato, in mesochilio angusto canaliculato transeunta; epichilio maximo minus carnoso galeato apice ovato inflexo. Columna libera, basi cornubus duobus elongatis succum stillantibus instructa, apice clavata et recurva marginibus in alasproductis. Stigma rima transversa.

A native of the woods in Demerara, where it is not uncommon hanging from the branches of trees, and suspending in the air the singular lips of its flowers like fairy buckets, as if for the use of the birds and insects that inhabit the surrounding foliage.

^{*} Literally, Helmet-flower; in allusion to the peculiar form of both the hypochilium and epichilium.

There certainly is not a more singular genus than this in the whole vegetable kingdom, nor one whose flowers are less like flowers to the eye of the ordinary observer. The sepals are of the most delicate texture; when young they spread equally round the centre, but after a few hours they collapse, and assume the appearance of a bat's wing half closed. The lip is furnished near its base with a yellow cup, over which hang two horns constantly distilling water into it, and in such abundance as to fill it several times; this cup communicates by a narrow channel formed of the inflated margin of the lip, with the upper end of the latter, and this also is a capacious vessel very much like an old helmet, into which the honey that the cup cannot contain may run over.

C. maculata differs from C. speciosa, not only in the colour of the flowers and the greater breadth of its leaves, but also in its lateral sepals being almost exactly half-cordate, without any bend in the middle, and in the horns of the base of its lip being much longer; the middle lobe of its lip too is less distinctly trifid.

C. macrantha, which has lately flowered at Mr. Knight's, surpasses both the others in the richness and magnitude of its flower, and is decidedly distinguished by the mesochilium being irregularly plaited and ridged.

Our drawing of this species was made from a specimen communicated by the Horticultural Society in July 1833.





* IPOMŒA Aitóni.

Mr. Aiton's Ipomæa.

PENTANDRIA MONOGYNIA.

Nat. ord. Convolvulace, Juss. (Introduction to the Natural System of Botany, p. 218.)

IPOMŒA.—Suprà, vol. 1. fol. 9.

I. Aitoni; villosa, foliis cordato-subrotundis, trilobis: lobis acutis lateralibus abbreviatis, pedunculis multifloris, bracteis sepalisque divergentibus acuminatissimis, corollâ subcampanulatâ tubo incrassato, staminibus basi glandulosis.

I. Aitoni. Hort.

Radix perennis. Caulis villosissimus. Folia villoso-velutina; lobo intermedio subrhombeo, acuminato; lamina petioli longitudine. Pedunculi petiolis longiores, multiflori. Flores densè aggregati; bracteis angustis, canaliculatis, acuminatis, recurvis, villosis, sepalorum longitudine. Sepala conformia, corollæ tubo longiora. Corolla violacea, lobis brevibus acutius-culis, tubo incrassato sub staminibus glanduloso. Stamina 5, ultra tubum exserta, quorum duo longiora. Ovarium disco cyathiformi insertum, biloculare; ovulis duobus cuique loculo; stylus simplex; stigma incrassatum bilobum.

A pretty perennial stove climber, not uncommon in collections under the name we have adopted. It flowers from April to October. Its native country is unknown to us.

This strictly belongs to the genus Ipomæa, as it has at length been limited by Professor Choisy. The only points in its structure which particularly deserve mention, are the thickened tube of its corolla, and the collection of glands at the base of each stamen, imitating as it were in Ipomæa the scale of the genus Lepistemon.

Increased by seeds and cuttings, the former of which are produced in some abundance.

The flowers open in the morning.

^{*} From ιψ a climbing plant, and ομοιος similar; in allusion to the resemblance of this genus to Convolvulus.







* GOVÉNIA supérba.

Superb Govenia.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEÆ, § VANDEÆ, Lindl. (Introduction to the Natura l

System of Botany, p. 262.)

GOVENIA, Lindl. Perianthium bilabiatum. Sepala lateralia falcata, labello supposita, basi paululum connata, supremo paulò majora. Petala sub sepalo supremo conniventia, breviora, obliqua. Labellum integerrimum, ecalearatum, concavum, cum basi parum productâ columnæ articulatum, sessile. Columna basi paulò producta, teres, subfusiformis, apice utrinque marginata. Anthera calyptriformis, 1-locularis. Pollinia 4, solida, incumbentia, caudiculâ-brevi, glandulâ minore triangulari.——Terrestres. Folia plicata. Spicæ radicales, multifloræ. Flores speciosi. Lindl. gen. et sp. Orch. 153.

G. superba; labello ovato-cordato, spicâ cylindraceâ, bracteis acuminatis, foliis oblongis acuminatis basi angustatis scapo æqualibus.

G. superba, Lindl. in Lodd. Bot. Cab. t. 1709. Gen. & Sp. Orch. l.c. Maxillaria superba. Lexarsa et Llave Orch. Mex. 2. 13.

Caulis cum foliis 5-pedalis. Folia 3-pedalia, et ultra, basi vaginis purpurascentibus vestita. Racemus 1-1\frac{1}{2}-pedalis, cylindraceus, floribus onustus. Sepala 7 lineas longa, lateralia semi-oblonga. Petala obliquè rhomboidea acuminata. Labellum 3 lineas tantum longum, lividum, unquiculatum, cordatum, ovatum, obtusum, suprà canaliculatum.

This noble species was originally discovered by Messrs. Lexarza and La Llave on the mountains near Valladolid, a town of Mexico, flowering in August. The native name is Azuzena amarilla. It is one of the handsomest plants of the whole order of Orchideæ, and is especially remarkable for its stately appearance, the rich orange of its flowers, and the long time they continue to open. The specimen in Messrs. Loddiges' collection grows to the height of a man; that from which our drawing was made was furnished by Mr. Bateman, in February 1834.

^{*} So called in compliment to James Robert Gowen, Esq. under whose care were conducted many of the curious experiments upon cross fertilization at High-clere, the seat of the Earl of Carnarvon.

It is found to bear the hottest and dampest stove, but like all the terrestrial species requires a season of repose.

Beautiful as is this plant it must be equalled in the showiness of its blossoms by the *Maxillaria liliacea*, or *Azuzena del Monte* of the people of Valladolid, in the neighbourhood of which town it grows beneath the shade of trees. This plant is described as having a scape about a foothigh, terminated by a thryse of snow-white flowers, whose segments are variegated with purple lines, and whose lip is spotted at the base with yellow. It is also in all probability a *Govenia*, and may be named *G. liliacea*.

Of a similar noble aspect is a species collected in Mexico by Count Karwinski, near Atotovilco el Chico, in a cool climate, flowering in June and July. Specimens of this plant, belonging to the Royal Herbarium of Munich, are now before us. The leaves are oblong-lanceolate, tapering to each end, especially to the point, a foot long and about 5 inches wide, and very like those of Govenia superba, except that they are smaller. The stem is stated to be five feet high. It is terminated by a short and very dense headed raceme of large flowers, to each of which is an oblong obtuse bract, not quite so long as the ovary. The raceme is 4 inches long, and as much broad at the base. In the form of the flowers it resembles Govenia superba very much, but they are three times as large; the sepals are an inch and half long and the other parts in proportion. The lip has an ovate form, but is not cordate at its base, it is not quite half so long as the sepals, and is marked towards its end with largish round very dark dots. The colour of the flowers cannot be ascertained from the dried specimen, but seems to have been pale and uniform; probably pale yellow. This plant may be thus distinguished —

G. capitata; labello ovato obtuso, racemo capitato, bracteis oblongis obtusiusculis, foliis oblongis acuminatis basi angustatis scapo multo brevioribus.





* MÍMULUS lúteus; var. variegatus.

Variegated Monkey-flower.

DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Scrophularineæ, Juss. (Introduction to the Natural System of Botany, p. 228.)

MIMULUS.—Supra, vol. 11. fol. 874.

§. Caule basi sæpius procumbente vel repente, rarius erecto; foliis 3-5-nerviis dentatis; calycibus ovatis tubulosisve sæpiùs inflatis. Bentham Scroph. Ind. p. 28.

M. luteus; glaber, foliis eroso-dentatis inferioribus longè petiolatis ovatis sublyratisve superioribus rotundatis cordato-amplexicaulibus, calycibus ovatis fructiferis campanulatis dentibus ovatis acutis supremo maximo. Benth. l c.

M. luteus. Linn. Sp. pl. 884. aliorumque.

Var. variegatus; corollæ tubo stramineo intus maculato, limbo purpureo.

M. variegatus. Lodd. Bot. Cab. t. 1872.

M. luteus variegatus. Hooker in Bot. Mag. 3336.

The first plants of this species which appeared in this country were reared from seeds received from Paris; but we believe without any intimation of its native country. Since that time Chile has been stated to be the origin of the species, but we know not upon what certain authority; not a specimen have we ever seen of it from that country. We should almost be inclined to suspect it to be some garden production, if it did not remain true from seed; at all events we agree with Dr. Hooker in referring it to *M. luteus* as a variety.

It is the prettiest of the genus, and is raised with the greatest facility, provided its seed is sown in a damp place under the shade of a wall, or where it is not fully exposed to

^{*} See folio 1330.

the sun's rays. So treated it grows vigorously and flowers beautifully in May and June, and will come up again in the same place year after year from its self-sown seeds. But if exposed to too bright a sun, and to dryness, it loses its vigorous habit, and becomes a poor dwindling thing not worth cultivation.

It will also strike out freely from cuttings.





* PLEUROTHÁLLIS Gróbyi.

The Groby Pleurothallis.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ, §. Malaxideæ, Lindl. (Introduction to the Natural System of Botany, p. 262.

PLEUROTHALLIS.—Suprà, vol. 9. fol. 759.

P. Grobyi; folio obovato emarginato caule triplo longiore racemo laxo erecto multoties breviore, bracteis minimis membranaceis, sepalis costatis oblongis acutis lateralibus apice tantùm sejunctis, petalis lanceolatis acutis, labello lineari obtuso carnoso superne unisulcato.

P. Grobyi. Bateman in litt.

Folia cum caulibus brevibus secundariis cæspitem efficientibus, atroviridia. Racemi laxi flexuosi. Sepala intus vitellina extus sanguineo vittata. Petala flava medio sanguinea. Labellum petalis paulò longius, sanguineum apice luteum. Columna semiteres, marginata, clinandrio anticè bidentato. Pollinia 2, parva, in unum ferè confluentia, basi (apice) pellucida sed glandulæ nullæ se affigentia.

A native of Demerara, whence it was imported by Mr. Bateman, who named it in compliment to Lord Grey of Groby, of whose skill and ardour in the cultivation of these curious plants we have already offered our own feeble acknowledgment. (See Grobya Amherstiæ, fol. 1740.)

It is nearly related to *P. picta* from the same country, and with it belongs to a very pretty set of species, all of which are characterized by having their leaves so much longer than the secondary stems as to conceal them and to form dense tufts.

It is readily cultivated in the Orchideous house; but where the atmosphere is not very damp, will require to be kept under a bell-glass.

Our drawing was made at Messrs. Loddiges in April last.

^{*} See folio 1298.

WE take this opportunity of filling a spare leaf with the characters of some unpublished species of Pleurothallis, together with a new arrangement of the genus, and a few remarks upon Specklinia and Physosiphon.

PLEUROTHALLIS.

§. 1. Acaules. Flores aggregati v. solitarii.

- Sp. 1. ruscifolia; 2. laurifolia; 3. succosa; 4. tribuloides; 5. cordata.
- 6. P. grandiflora; folio perfoliato oblongo-lanceolato caudato apice tridentato, pedunculis unifloris fasciculatis, sepalo supremo ventricoso acuminato lateralibus in unum connatis recurvis triplo latiore, petalis lineari-lanceolatis hispidociliatis, labello breviore unguiculato subrotundo carnoso ciliato supra unguem excavato.——In Peruvia; supra arbores in convalle Lloæ, alt 8000-ped, Hall. (hab. s. sp. comm. cel. Hooker.)
- 7. P. angustifolia; caulibus ascendentibus folio lineari-lanceolato longioribus, floribus pedicellatis subsolitariis, sepalis carinatis, petalis lanceolatis denticulatis, labello lineari acuto marginibus pone basin incrassatis.——In Mexico, prope Xalapam, Deppe. (h. s. sp.)
- 8. P. bidentata; caulibus ascendentibus folio oblongo-lanceolato apice bi-tridentato longioribus, floribus pedicellatis subsolitariis, sepalis ecarinatis, labello lineari obtuso apice ciliato.——Prope Rio Janeiro, Forbes. (h. s. sp.)
- 9. P. papillosa; caulibus strictis folio angustè oblongo apice tridentato paulò longioribus, pedunculis subaggregatis unifloris flore vix longioribus, sepalis campanulatis lateralibus semiconnatis supremo oblongo brevioribus, labello subhastato obtusissimo apice vittisq. duabus elevatis carnosis papillosis—In Braziliæ prov. Minarum in arboribus ad S. João Baptista, Martius (ex. s. sp. in hb. M.) Flores majusculi.
- 10. P. discoidea; caulibus strictis folio ovato-lanceolato brevioribus, pedunculis solitariis unifloris, sepalis oblongis acutis lateralibus omnino connatis, petalis linearibus acuminatis decurvis, labello cordato-ovato undulato obtusiusculo sepalis subæquali.——In insula Trinitatis (v. ic. pict. in hb. Hooker.) Facies P. ruscifoliæ. Flores flavi maculâ sanguineâ oblongâ anticè bidentatâ in medio labelli.
- 11. P. punctata; caulibus strictis folio crasso ovali plano-convexo marginato longioribus, floribus solitariis breviter pedicellatis, petalis lanceolatis apice pubescentibus, labello unguiculato cordato-sagittato obtuso, columna elongata.—In Brazilia (exam. v. c.). Folia subtus purpureo punctata. Flores atropurpurei. Petala herbacea. Tota planta vix 1½ poll. alta.

§. 2. Acaules. Flores racemosi.

- a. Folia caulibus secundariis longiora (Cæspitosæ).
- 12. alpestris; I3? laxa; 14. Grobyi.
- 15. P. picta; folio spathulato marginato retuso racemis laxis duplò breviore, bracteis minimis, sepalis acuminatis lateralibus apice tantùm sejunctis, petalis lineari-lanceolatis acutis, labello lineari obtuso carnoso supra 1-sulcato.—In Demerora, Loddiges (exam. v. c.).
- 16. P. hymenantha; folio lineari-lanceolato apice obsoletè 3-dentato racemis flexuosis capillaribus subæquali, bracteis minimis, sepalis acutis lateralibus semisejunctis, petalis acuminatis parum brevioribus, labello oblongo obtuso subundulato complicato.——In Brazilia; in arboribus vetustis prope Retiro provinciæ Sebastianop. Martius. (exam. s. sp. in hb. M.)
- 17. P. ochreata; folio crasso lanceolato complicato mucrone acuto racemo denso flexuoso nutante duplò longiore, bracteis cucullatis imbricatis acutis, sepalis carinatis acuminatis lateralibus semiconnatis, petalis lineari-oblongis nanis mucronatis, labello In Brazilia; in rupibus Serra do Monte Santo provinciæ Bahiensis, Martius. (exam. s. sp. in hb. M.) Calyx ruber v. miniatus. Petala duplo minora flava, omnia subæquali. Mart. mss.
- 18. P. rupestris; folio tereti mucronato anticè sulcato racemo stricto rigido paulò breviore, bracteis parvis rigidis concavis, sepalis acutis lateralibus semiconnatis, petalis lanceolatis ciliatis, labello subtrilobo membranaceo obtuso appendice magno carnoso bifurco: cruribus parallelis porrectis acutis.——In Brazilia, inter rupes M. Itacolumi et Moro de Va. Ra. provinciæ Minarum, Martius. (exam. s. sp. in hb. M.) Scapus rubenti-virens. Sepala purpurascentia. Petala purpura. Mart. mss.
- 19. P. teres; folio tereti racemo gracili breviore, bracteis membranaccis ochreatis, floribus pendulis, sepalis acuminatis lateralibus apice tantum liberis, petalis minimis oblongis acutis, labello lineari canaliculato acuto marginibus incrassatis, columnâ basi pubescente. —In Brazilia, Loddiges (exam. v. c.). Flores cinnamonei. Folia omnino Leptotis bicoloris.
- 20. P. hians; caule brevi, folio oblongo basi angustato obtuso racemo flexuoso 6-9-floro duplò breviore, bracteis minutis ochreatis, floribus bilabiatis: labio postico 2-dentato antico oblongo obtuso, petalis cuneatis, labello ovato acuto complicato.——In Brazilia, in montibus Organ (v. ic. pict. et exam. fl. s. in herb. Hooker.) Caulis pollicaris. Folium 3-pollicare. Scapus fusco purpureus. Flores ejusdem coloris, aciculatim maculati, extùs pallide cinnamonei. Sepalum supremum anticum, lateralibus connatis posticis æquilatum. Petala labellumq. nana atropurpurea. Columna ejusdem coloris clinandrii margine membranaceo latissimo.
 - 21. spiralis. 22. racemiflora.
 - b. Folia caulibus secundariis breviora v. aqualia. (Macropoda.)
- 23. prolifera; 24. saurocephala; 25. quadrifida (=Dendrobium quadrifidum. La Llave); 26. pulchella; 27. Lanceana.
- 28. P. Jamiesoni; folio lincari-oblongo carnoso submucronato racemo secundo stricto duplò breviore, bracteis densis brevibus ochreatis cucullatis, sepalis

oblongis subæqualibus leviter carinatis lateralibus basi tantum connatis, petalis duplo brevioribus apice rotundatis, labello breviore membranaceo rhombeo-trilobo plicâ unguis transversâ.—In Peruvia, in præcipitiis Pichinchæ haud procul a Quito, Jumieson. (exam. s. sp. in hb. Hooker.) P. pulchellæ valdè similis, sed minor.

- 29. P. capillaris: folio lineari-lanceolato racemis capillaribus fasciculatis subæquali, sepalis acuminatis lateralibus basi connatis, petalis ferè æquilongis serratis acuminatis, labello lanceolato basi angustato acuto membranaceo 3-venio.

 ——In Brazilia, in arborum truncis provinciæ Sebastianop. Martius. (exam. s. sp. in hb. M.) Facies P. ruscifoliæ.
 - 30. lanccolata.
- 31. P. sclerophylla; folio oblongo petiolato obtuso carnoso racemis multo breviore, bracteis ovatis cucullatis, sepalis acuminatissimis omnibus ferè liberis, petalis nanis obtusis, labello oblongo conduplicato apice piloso-glanduloso.——In Brazilia; in Serra de Piedade, prov. Minarum, etiam in rupibus campestribus prov. S. Pauli, Martius. (exam. s. sp. in hb. M.)
- 32. P. rubens; folio oblongo-lanceolato obtuso, racemis longissimis, bracteis oblongis ochreatis, sepalis lanceolatis acuminatis lateralibus basi tantùm connatis petalis obtusis, labello obovato repando obtuso lineis 2 elevatis flexuosis carnosis.

 ——In Brazilia; in rupibus ad Opp. S. Joao d'El Rey, Martius. (exam. s. sp. in hb. M.)
 - §. 3. Caulescentes; i. e. rhizomate nullo sed caule folioso.
 - 33. macrorhiza. 34. caulescens.

Under the name of *Stelis tubata*, Messrs. Loddiges have published a very curious plant with the habit of Pleurothallis, but with its sepals all united into a tube, which is inflated at the base and contracted at the mouth. Otherwise its fructification has the structure of *Stelis*. I propose to distinguish this as a peculiar genus, with the following name and character.

PHYSOSIPHON.

Calyx tubulosus basi ventricosus, apice 3-fidus. Petala in fundo calycis carnosa, nana. Labellum et columna Stelidis. Pollinia 2, sphærica.——Herbæepiphytæ habitu Pleurothallidis.

- 1. P. Loddigesii; (=Stelis tubata, Lodd. Bot. Cab. t. 1601.)
- P. emarginata; (=Pleurothallis emarginata, Lindl. Gen. εt. Sp. Orch. Pl. p. 6.)
- 3. P. spiralis; folio angustè oblongo subemarginato carnoso spicâ spirali confertà duplò breviore, bracteis minimis ovatis acutis cucullatis, calyce semitripartito laciniis erectis acutis, petalis cuneatis carnosis, labello ovato-subrotundo membranaceo apiculato trivenio.——In Brazilia, ad Portum Sa. Catharinæ, Tweedie. (hab. s. sp. comm. Cel. Hooker.)

SPECKLINIA.

To this genus is to be added the following:-

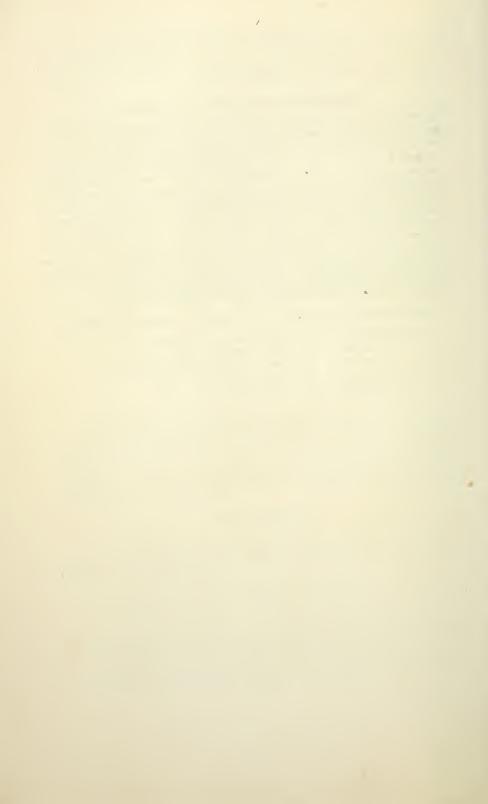
S. atropurpurea; vaginis caulis 2-3 ventricosis, folio oblongo plano 7-9-venio, flore solitario subsessili, petalis 3-cuspidatis, labelli laminâ sagittatà.—
In Jamaica. (Exam. s. cult. in herb. Hooker. ex horto Liverp.) Folium 2½ poll. longum, basi angustatum. Vaginæ infundibulares, pollicem longæ, in caulem 2-pollicarem. Flores atropurpurei. Ovarium lineam longum, hexapterum; alis apice truncatis petalinis minoribus. Alabastrus quem tantum vidi semunciam longus, angustus, falcatus. Sepala anteriora basi gibbosa, oblongo-linearia. Petala nana, vix 2 lineas longa, ovata, 3-cuspidata, obliqua, sæpiùs venâ alterâ excurrente, alterâ in dimidio majore petali abbreviatâ. Labellum unguiculatum, in columnam pronum, cum ejus basi articulatum; ungue lineari, 3-venio axi cristato, laminâ sagittatâ apicibus posticis obtusis. Columna petaloideo-alata, apice tridentata, basi paulò producta; pedis marginibus carnosis rotundatis medio unidentatis. Anthera parva 1-locularis. Pollinia 2, pyriformia, atropurpurea, apice materie diaphanâ granulosâ stigmati adhærentia.

And probably several spurious Dendrobia of authors, especially—

S. retusa = Dendr. retusum, *La Llave*. S. scariosa = Dendr. scariosum, *Do*.

S. pusilla = Dendr. pusillum, Humb. et Kunth.

S. acuminata = Dendr. acuminatum, Do. S. elegans = Dendr. elegans, Do.







* EDWÁRDSIA chilénsis.

Chilian Mayu Tree.

DECANDRIA MONOGYNIA.

Nat. ord. Leguminose, Juss. § Papilionacee. (Introduction to the Natural System of Botany, p. 87.)

EDWARDSIA.—Suprà, vol. 9. fol. 738.

E. chilensis; foliolis 13-19 elliptico-oblongis obtusis rigidis subtus sericeis, petalo supremo lateralium longitudine, legumine binodoso aptero.
Edwardsia chilensis. Miers Trav. in Chili; the name only.
Sophora macrocarpa. Smith in Rees. De Cand. Prodr. 2. 96. Hooker et Arnott in Bot. Misc. 3. 177.

A fine tree, native of Chile, where the inhabitants call it Mayu. It was introduced by Messrs. Loddiges in 1822, having been sent them by General Paroissien under the name of "Sophora Myrospermum."

It proves to be a hardy handsome tree, flowering in May in great profusion. We believe that it at present exists in no other collection.

This is plainly an Edwardsia, notwithstanding the opinion of the late Sir James Smith to the contrary, and notwithstanding the alleged want of wings to its pods. Supposing that fact to be as stated, it only shews that the winged pod is unessential to the genus Edwardsia, and not that the genus itself is a bad one; for surely if there be any one genus on which Nature has set her mark more distinctly than another it is this. Mistakes like those of Smith are the certain accompaniments of the meagre system of artificial Botany.

^{*} See folio 738.

It is the short loose axillary racemes, the hard cupshaped calyx, slit on the upper side, and the broad vexillum which overlaps the other petals and is usually absolutely parallel with them, that distinguish *Edwardsia* from *Sophora*, whose racemes are terminal, calyx soft and regularly toothed, and vexillum narrow and recurved, or reflexed





* MAXILLÁRIA crócea.

Saffron-coloured Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ, § Vandeæ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

MAXILLARIA.—Suprà, vol. 11. fol. 897.

§. 2. Scapigeræ. Pedunculi radicales. Labellum anticum. Scapi uniflori.

M. crocea; pseudobulbis oblongis compressis foliatis, foliis oblongis undulatis obtusis emarginatis latè vaginantibus, scapis erectis unifloris laxè vaginatis foliis duplo brevioribus, sepalis petalisque angustè triangularibus apice elongatis abruptè acutis, labello obovato obtuso levissimè trilobo apice carnoso crispo supra medium unituberculato.

We have received the drawing and following account of this plant from Mr. Booth.

"We owe the introduction of this curious plant to Capt. Sutton, of his Majesty's Packet establishment at Falmouth, who imported it from Rio Janeiro in the spring of 1833, and presented it, with others, to Sir C. Lemon, Bart., M. P., in whose collection at Carclew, Cornwall, the subject of the present notice produced its flowers in August 1834.

"Root fibrous. Pseudo-bulbs small, oblong, compressed nearly covered by the three sheathing, strap-shaped leaves which are each thick and rigid, from four to six inches long, and an inch in width, a little twisted, with an oblique sharp point. The leaf on the bulb is similar to the others but much longer. All of them are of a deep green above, and a pale silvery green beneath. Scapes four inches high, one-flowered, round and slender, rising from the base of the leaves, and covered with three or four, thin, pale green,

^{*} See folio 1428.

acuminate bracts, forming a joint at their junction with the stem. Flowers before expansion having some resemblance to the beak of a bird, pale green with a brownish tinge at the spur. Perianth of a greenish yellow, becoming of an orange colour when expanded. Sepals narrow and pointed, the three exterior ones being each about the same size and length, with their edges turned back. The two interior ones are rather shorter than the others, somewhat curved, and crossing so as almost to conceal the column. Labellum about half the length of the sepals, thick and fleshy, connected to the lengthened base of the column, which forms the spur; cucullate and crisp at the margin, which is rather paler than the sepals, otherwise it is of a brownish red colour, together with the column.

"It is obviously allied to *M. picta* and *punctata*, from both which the character assigned to it, abundantly distinguish it.

"Like most of the terrestrial Orchideous plants from Tropical countries, it requires the constant heat of the stove, and to be kept rather moist. It seems to flourish in the soil we find in the hollow decayed trunks of trees, mixed with some finely chopped moss; and promises to increase freely by off-sets."









* STANHÓPEA oculáta.

Eyed Stanhopea.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ, § Vandeæ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

STANHOPEA.—Suprà, vol. 18. fol. 1529.

S. oculata; labello medio constricto, hypochilii clongati lateribus cornutis erectis basi bimaculatis, epichilio ovato acuminato cornubus duobus baseos incurvis. Lindl. gen. et sp. Orch. Pl. p. 158.

Ceratochilus oculatus. Lodd. Bot. Cab. t. 1764.

Imported by Messrs. Loddiges. It is the most interesting of this splendid genus, on account of the extremely delicate waxy appearance of its surface, the softness of its ground colour, and the richness of the deep purple spots, which lying upon a bright yellow field so very conspicuously ornament the base of the lip and the petals.

Our drawing was taken from a most noble specimen produced in July 1834, in the stove of Mr. Bateman. The leaves, including the petioles, were more than two feet long, and being of the darkest green had a most imposing appearance. Mr. Bateman informs us that he finds it requires eight such leaves to form a flowering plant; and that those who wish to succeed in blossoming it must suffer it to remain a long time undisturbed, since a good many pseudo-bulbs are required to furnish one really fine specimen.

The singular form of the labellum of this and some other Orchideous plants has rendered it necessary to distinguish it into three parts for the convenience of description. The lowest part of the lip is the hypochilium, the upper end the epichilium, and the intermediate portion the mesochilium. All these parts are, however, nothing more than divisions in a very fleshy lip, produced by contractions of its sides, and by the lobes, so common in the order, variously arranged and combined.

The species is at once known by the narrowness and length of the hypochilium, independently of all other circumstances.

It is said to be a native of Brazil; but we suspect some mistake in this statement. It is certainly wild in Mexico, for it exists among Count Karwinski's plants in the Royal Munich Herbarium.





* PRÚNUS japonica.

The Single Chinese Plum.

ICOSANDRIA MONOGYNIA.

Nat. ord. Rosaceæ, § Amygdaleæ, Juss. (Introduction to the Natural System of Botany, p. 81.)

PRUNUS.—Suprà, vol. 2. fol. 136.

P. japonica. Supra, vol. 1. fol. 27. The double state.

It is always interesting to procure the wild forms of cultivated species, and so see from what humble originals Nature produces some of the most striking of her works.

The double Chinese Plum, or Almond, as it is often incorrectly called, is beyond all comparison the handsomest plant of its season; there is nothing to vie with its crowded clusters of most delicate blushing flowers, the petals of which are loosely, but symmetrically, arranged into the most perfect of vegetable beauties. The simple shrub now represented is its origin, and is one of the many examples of the creation by the patient Chinese of the fairest ornaments of the garden, from the most inconspicuous plants of the woods.

For its introduction the public is indebted to John Reeves, Esq., by whom so large a proportion of all the fine Chinese flowers now common all over Europe have been procured for this country.

It appears to be a hardy shrub; our specimen, however, was taken in January last, from a plant which had flowered in a greenhouse.

The double state of the species is represented in the first volume of this work.

^{*} See folio 1243.







* MAXILLÁRIA picta.

Painted Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDEÆ, § VANDEÆ, Lindl. (Introduction to the Natural System of Botany, p. 262.)

MAXILLARIA.—Suprà, vol. 11. fol. 897.

§. 2. Scapigeræ. Pedunculi radicales. Labellum anticum. Scapi uniflori.
M. picta; pseudobulbis ovatis subsulcatis 1-2-phyllis, foliis oblongo-lanceolatis planis, scapis crectis unifloris distanter vaginatis foliis duplò brevioribus, sepalis petalisque lanceolatis (abruptè acutis) sub-conniventibus, labello trilobo medio unituberculato lobis oblongis obtusis lateralibus brevioribus.
M. picta. Hooker in Bot. Mag. t. 3154. Lindl. gen. & sp. Orch. p. 146.

A truly beautiful plant found wild in the Organ mountains of Brazil, and originally introduced by the late lamented Mrs. Arnold Harrison. When well managed it throws up a profusion of its gay speckled flowers, which remain perfect for some time.

Our drawing was made in the stove of the Messrs. Loddiges in November 1834.

There are two other unpublished species of Maxillaria, belonging to this section, which we take this opportunity of naming.

1. M. rufescens; pseudobulbis ovatis subtetragonis monophyllis, foliis lanceolatis utrinque acuminatis, scapis unifloris prostratis vaginis minimis distantibus, sepalis petalisque oblongis conformibus obtusis, labello oblongo trilobo etuberculato laciniis lateralibus minimis acutis intermediâ elongatâ emarginatâ.

A native of Trinidad, whence it was imported by Mr. Lowe of Clapton. Our description is taken from a drawing and flower transmitted from Chatsworth in December 1834.

^{*} See folio 1428.

It is a species of no beauty. The sepals are a dull greenish purple, the petals and lip yellow, the latter speckled with dull purplish red. Possibly the specimen was bleached, and the colours would become brighter if the plant had flowered in brighter weather. Stands next M. picta.

2. M. graminea; pseudobulbis nullis, foliis gramineis recurvis, perianthio campanulato, sepalis oblongis obtusis lateralibus paululum connatis, petalis angustioribus, labello cum pede longè producto columnæ articulato trilobo: lobis lateralibus semi-ovatis acutis ascendentibus intermedio majore reniformi, tuberculo disci magno carnoso truncato posticè bilobo.

A native of Demerara; imported by Mr. Lowe; flowered in Messrs. Loddiges' collection, January 1835. A small and inconspicuous species. The blossoms are pale yellow, with the segments a little banded with purple near the base. Not very nearly related to any known species.





* CHIRÓNIA pedunculáris.

Long-stalked Chironia.

PENTANDRIA MONOGYNIA.

Nat. Ord. Gentianeæ, Juss. (Introduction to the Natural System of Botany, p. 215.)

CHIRONIA.—Suprà, vol. 3. fol. 197.

C. peduncularis; glabra, foliis ovato-lanceolatis acuminatis sessilibus 3-5-veniis internodiis subbrevioribus, pedunculis unifloris foliis longioribus, calyce tubo corollæ breviore, caule tereti.

C. trinervis. Hort. nec Linn.

Frutex diffusus, 3-4-pedalis, atroviridis, glaber, succo amarissimo sublacteo scatens. Internodia basi purpurascentia. Folia 3-5-venia, 2-poll. longa, sæpe internodiis breviora. Pedunculi axillares et terminales, foliis duplò longiores, uniflori. Calyx 5-partitus, laciniis linearibus acuminatis, tubo corollæ brevioribus. Corolla persistens, tubo gracili viridi semunciali, limbo patente 5-partito, purpureo, ejusdem longitudinis; laciniis ovatis acutis post anthesin convolutis. Stamina 5, fauce tubi inserta, a stylo aversa, exserta; antheris linearibus poro duplici apicis dehiscentibus, defloratis rectis. Ovarium teres, acuminatum, uniloculare marginibus carpellorum 4 inflexis ovuliferis; stylo continuo; stigmate dilatato bilobo. Fructus semimaturus carnosus, amarissimus.

A very pretty greenhouse shrub, covered with a succession of purple flowers from July to October, and propagated freely by cuttings.

Nothing can be easier than its management, as it grows in any kind of soil, will thrive out of doors in summer, and will survive the winter without injury in a very indifferent greenhouse.

^{*} Named in honour of Chiron the Centaur, one of the earliest medical practitioners whose names have been preserved. The intense bitterness of the genus indicates its powerful tonic properties.

We are unacquainted with its history; it does not seem to have been before described; and we have not been able to learn even its native country. In gardens it is called Chironia trinervis, but it is a totally different plant from the Ceylon species so named by Linnæus, which appears to be a genuine Exacum, as that genus is limited by Dr. Brown in his Prodromus.

The bitterness of the species is most remarkable, even m ong its bitter neighbours.





* MAXILLARIA densa.

Dense-flowered Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. Orchider, § Vander, Lindl. (Introduction to the Natural System of Botany, p. 262.)

MAXILLARIA.—Suprà, vol. 11. fol. 897.

§. 1. Axillifloræ. Pedunculi axillares.

M. densa; pseudobulbis oblongis compressis axillaribus monophyllis, foliis oblongo-lanceolatis obtusis emarginatis, racemis axillaribus densissimè aggre-

oblongo-lanceolatis obtusis emarginatis, racemis axillaribus densissimè aggregatis, bracteis cucullatis, perianthiis bilabiatis, sepalis lineari-lanceolatis acuminatis carinatis, petalis paulo minoribus, labello oblongo indiviso apice recurvo et canaliculato, medio lineâ transversâ elevatâ.

A native of Mexico, whence it was imported by the Messrs. Loddiges, in whose stove it flowered in January last.

It belongs to that set of Maxillarias on which the genus was founded by the authors of the Flora Peruviana, and which in some respects appear to differ from those with which we are but acquainted in Gardens. The stems rise some height above the ground, and are closely invested with brown withered scales, from the axils of which spring the pseudo-bulbs and flowers; in most Maxillarias on the contrary, there seems to be no stem, but the pseudo-bulbs sit close upon the ground, as in *M. picta* and ochroleuca. In truth, however, there is a stem in both kinds; only it is erect and above ground in the one, and prostrate or underground in the other. And so it is with all the pseudo-bulbous Orchideæ; their true stem is in most cases a rhizoma, like that of Iris, rooting on the side that touches the ground, and pushing up leaves and pseudo-bulbs on the other.







* FÚCHSIA discolor.

Port Famine Fuchsia.

OCTANDRIA MONOGYNIA.

Nat. ord. Onagraceæ, Juss. (Introduction to the Natural System of Botany, p. 56.)

FUCHSIA.—Suprà, vol. 10. fol. 847.

F. discolor; dumosa, ramosissima, vinosa, ramulis levissimė pubescentibus, foliis ovatis denticulatis undulatis petiolatis oppositis ternatisque, pedunculis foliis longioribus, petalis obtusis convolutis calycis laciniis acuminatis brevioribus, staminibus longė exsertis.

A native of Port Famine in the Falkland Islands, whence it was some years since introduced by Mr. Lowe. Our drawing was made from a plant in the Garden of the Horticultural Society in August last. It has the same season of flowering as the other Fuchsias, and may be increased readily by cuttings in like manner.

If we are asked to state in what respects this differs botanically from *F. gracilis* and *tenella*, we should find it very difficult to answer the question. And yet it is a decidedly different plant; remarkable for its compact, bushy manner of growth, its deep purple branches, its small very undulated leaves, and also for its being apparently more hardy than any other Fuchsia yet in the Gardens. For the latter reason we attach especial importance to it, for by a judicious intermixture of its pollen with such beautiful plants as *F. conica*, *globosa*, and its other more tender relatives, the whole race may probably be rendered capable of bearing

^{*} See folio 1269.

the climate of Great Britain, and may thus become far more generally valuable than they yet are.

It is probable that those are right who consider the greater part of the Chilian Fuchsias mere varieties of F. macrostema, and if so this will have to be added to the list as a dwarf contracted kind. F. globosa and conica are, however, to all appearance distinct species.





FERNANDÉZIA acúta.

* Sharp-leaved Fernandezia.

GYNANDRIA MONANDRIA.

Nat. ord. Orchideæ, Ş. Vandeæ, Lindl. (Introduction to the Natural System of Botany. p. 262.)

FERNANDEZIA, Fl. Peruv. Perianthium patens. Sepala libera. Petala conformia, sub sepalo supremo conniventia. Labellum anticum v. posticum, ecalcaratum, liberum, trilobum, disco tuberculatum. Columna brevis, utrinque aurita. Anthera bilocularis. Pollinia 2, solida, obovata, glandula....equitantia, imbricata. Racemi pauciflori, terminales v. laterales. Flores parvi lutei. Lindl. Gen. et Sp. Orch. p. 207.

F. acuta; foliis acuminatis carinatis, corymbo laxo multifloro, bracteis obtusis membranaceis, labello lineari 3-lobo laciniis lateralibus rectis abbreviatis intermediâ emarginatâ obtusâ, disco pulvinato tuberculo minimo pone basin.

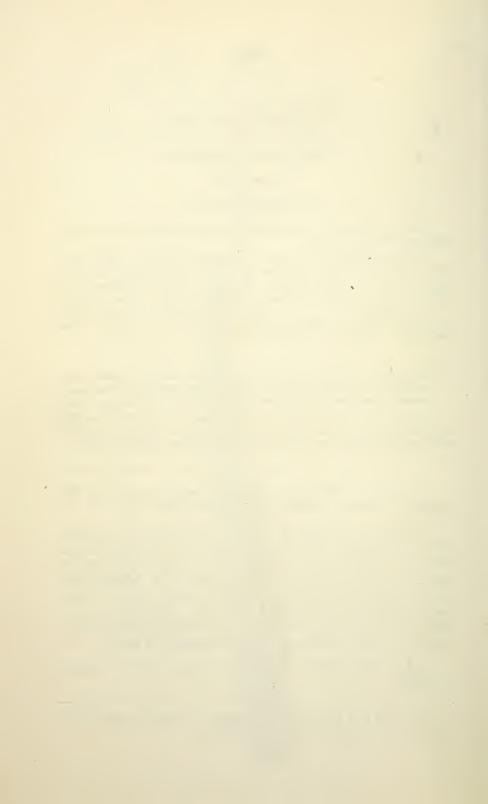
Omnia fere F. elegantis nisi folia et labellum. Hoc pallidè luteum disco prominulo pulvinato anticè bilobo sanguineo-marginato; laciniis lateralibus nullo modo hastæ effiqiem referentibus sed laciniá intermediá parallelis.

A native of Trinidad, whence it was imported by Mr. Knight, in whose collection it flowered in June last.

In habit is very like *F. elegans*, from which it is principally distinguished by the tapering form of its leaves, and the shape of its lip, which, instead of having a sort of hastate form, in consequence of the divergence of its lateral lobes, and a number of irregular unequal tubercles upon its disk, has the lateral lobes parallel with the middle one, only a single small tubercle at its base, and a slightly elevated disk which is 2-lobed, and bordered with crimson in front.

A hot damp stove is necessary to keep this rare species in health.

^{*} So called after George Garcias Fernandez, a Spanish Botanist, who is unknown, except through the medium of this genus.











* CÉREUS triangúlarís.

Triangular Torch-thistle.

ICOSANDRIA MONOGYNIA.

Nat. ord. Cactacem. (Introduction to the Natural System of Botany, p. 54.)

CEREUS, D. C. Scpala numerosissima, imbricata, basi ovario adnata, in tubum elongatum concreta, exteriora breviora calveinalia, media longiora colorata, intima petaliformia. Stamina numerosissima cum tubo concreta. Stylus filiformis apice multifidus. Bacca sepalorum reliquiis areolata, tuberculata aut squamata. Cotyledones nullæ? (depauperatæ).—Frutices carnosi, elongati, axi ligneo internè medullifero donati, angulis verticalibus spinarum fasciculos gerentibus regulariter sulcati. Anguli seu alæ nunc plurimæ, nunc paucissimæ, rariùs duæ tantum et tunc rami compresso-alati. Flores ampli è spinarum fasciculis aut crenis angulorum orti. De Cand. Prodr. 3. 463.

§. 2. Serpentini. Caulis articulatus prostratus radicans vel volubilis. D. C.

*** 3-4-angulares.

C. triangularis; repens trigonus, aculeis brevibus quaternis decussatis, sepalis exterioribus spatulatis apice foliaceis, petalis lanccolatis cuspidatis.
Cactus triangularis. Linn. sp. pl. 666. Jacq. amer. 152.
Cereus triangularis. Haworth. syn. 180. De Cand. prodr. l. c.

A native of Mexico and the West India Islands, whence it was introduced long since, but it flowers so rarely that it has never yet been represented from an European specimen. Bradley, who has given it in his work on succulent plants, has only figured its stem.

For the specimen from which our drawing was made we are indebted to Sir George Staunton, Bart., in whose garden at Leigh Park, near Havant, it flowered in Sep-

^{*} Literally, a torch or taper; a name translated by the English Torchthistle; and given to these plants in consequence of the upright kinds having something the appearance of the tapers used in the ceremonics of the Roman Catholic religion.

tember 1834, under the good management of Mr. Robert S. Wilson the gardener. The plant had been in the collection at Leigh Park upwards of fifteen years without blossoming; between March and September it produced shoots upwards of seven feet long.

Two flowers were perfected, of which one opened about six o'clock in the afternoon of the 22nd of September, and faded about eleven A.M. on the following day; the other was despatched to London by coach on the 24th of the same month, and reached London in perfect condition.

It was indeed a beautiful object, its petals were of the most dazzling whiteness, the effect of which was greatly heightened by the dense mass of yellow stamens occupying the centre, and by the border of olive green sepals, on which the petals reposed. This is said to have the largest flowers of all the species, not even excepting the common night-blowing Cereus; its fruit is described as being quite smooth, of a rich scarlet, and with the size and form of a goose's egg.





1808

* EÚTOCA víscida.

Clammy Eutoca.

PENTANDRIA MONOGYNIA.

Nat. ord. Hydrophyllaceæ. (Introduction to the Natural System of Botany. p. 244.) EUTOCA.—Suprà, vol. 14. fol. 1180.

E. viscida; glanduloso-pilosa viscosa, caule erecto ramoso, foliis cordato-ovatis subangulatis serratis, racemis elongatis furcatis simplicibusque, placentis multi-ovulatis.

E. viscida. Bentham MSS.

Annua, undique pilis nigro-capitatis glandulosis viscosa; caule tereti ramoso bipedali. Folia tactu mollia et oleosa, 2 p. lata, paulò longiora, sensim decrescentia, superiora grosse simpliciter dentata. Racemi gyratim elongantes, multiflori, ebracteati. Sepala linearia, obtusa, capsulæ longitudine. Corolla generis, amæne cærulea tubo roseo. Filamenta setacea basi villosa; antheræ flavæ. Capsula ovata, mucronata, apice bivalvis, semibilocularis, placentis parietalibus polyspermis. Semina minuta, fusca, scrobiculata, marginibus areolarum acutis centro foveola excavata.

A new hardy annual, found in California by Mr. Douglas, and raised by the Horticultural Society, in whose garden it flowered this summer for the first time. It is perfectly hardy and will grow in any common soil. Our drawing was made last July.

The blue of the flowers is remarkably deep and brilliant, so that the plant has a handsome appearance; but its leaves are rather coarse and weedy. We know, however, of no plant better adapted for bouquets; for it will go on growing and flowering in water for two or three weeks after being gathered.

The whole of its surface is covered with hairs, having little black heads filled with a viscid secretion, and sticking to the fingers like those of the Henbane; these are so crowded about the pedicels as to give them quite a sooty aspect.







* VÁNDA téres.

Taper-leaved Vanda.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ. (Introduction to the Natural System of Botany, p. 262.)

VANDA.—Suprà, vol. 6. fol. 506.

V. teres; foliis teretibus, racemis ascendentibus subbifloris foliis æqualibus, sepalis oblongis obtusis: supremo erecto lateralibus semitortis labello suppositis, petalis majoribus suborbiculatis undulatis, labello basi conico: laciniis lateralibus ascendentibus subtruncatis intermediâ pubescente apice dilatatâ truncatâ emarginatâ. Lindl. gen. et sp. Orch. p. 217.

This superb epiphyte was originally discovered upon trees in Sylhet by Dr. Wallich, and it has more recently been met with by Mr. William Griffith abundantly near Medown in the Burmese Empire, also growing on trees in the woods.

When Dr. Wallich came to England, this species formed one of the numerous living plants brought home under his care, and blossomed during the voyage; the very flowers which were then produced we are so fortunate as to possess in spirits, through the kindness of their liberal discoverer; they measure nearly four inches and a half from the tip of one petal to that of the other, but only two were formed upon the spike. The specimens from Mr. Griffith are not

^{*} Vandá is the Sanscrit name of the original species of this genus.

quite so large in the flower, but there are three blossoms to each spike.

That from which our drawing was taken was produced at Syon, in the collection of his Grace the Duke of Northumberland, by whose permission we are enabled to publish it. It was not quite so fine as what we have represented, but considering what the native specimens are we have felt quite justified in forming our figure between the two. The flowers in the accompanying plate, though larger than those on the plant at Syon, are considerably smaller than those we possess in spirits.

Nothing can exceed the flowers of this plant in delicacy of texture or softness of colour, the deep purple of the petals softens away to the margin, and seems to melt as it were into the purer white of the sepals, while the rich crimson and yellow of the lip renders the brilliancy of the other parts still more conspicuous.

We found the plant had been managed by having its stem covered with moss, which if kept damp would maintain the surface in a uniform state. We do not, however, perceive any trace of the roots in our wild specimens having been growing among moss, and we consider it probable that it will succeed as well if the roots are exposed freely to the air.





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* CRATÆGUS Douglásii.

The Douglas Thorn.

ICOSANDRIA MONO-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. (Introduction to the Natural System of Botany, p. 83.)

CRATÆGUS.-Suprà, vol. 83. fol. 1128.

C. Douglasii; foliis obovatis ovalibusque inciso-serratis acutis basi cuneatis glabris demum subcoriaceis sublucidis, laciniis calycis ovatis glanduloso-serratis pedunculisque glabris, spinis rigidis rectiusculis.

C. punctata. B. brevispina. Douglas in Hook. Fl. Bor. Am. 1.201.

Rami ascendentes, cinereo-purpurei, glabri, spinis rigidis lævigatis, nunc brevibus nunc longissimis. Folia semper glabra, petiolis omninò eglandulosis, inciso-serrata nullo modo angulata vel plicata, sub fine anni coriacea et sublucida, citò tamen decidua, paulò post C. glandulosam et punctatam. Inflorescentia cymosa glabra, floribus magnitudine mediocri subtetragynis. Sepala ovata glanduloso-serrata. Fructus parvus, atropurpureus.

A native of North West America, where it was collected by Mr. Douglas. A hardy tree of small size flowering in May.

We believe this to be essentially different from all the published species of this genus, but the whole of the synonymy is in so deplorable a state of confusion, from want of some monographer, who at the same time is well acquainted with the living trees, and has access to authentic sources of information, that we are by no means certain that it has not already appeared in print as a species.

Mr. Douglas considered it a variety of C. punctata, but the leaves of that species are far thinner, and have an evident tendency to be furrowed as if plaited; its branches are

^{*} See folio 1161.

horizontal, and its fruit large and either red or yellow, in all which respects it differs from this. Its inflorescence, moreover, is downy. It is possible that what is called C. macracantha in the gardens may not be specifically distinct, but as its fruit is red it requires further examination.

The leaves of this species are remarkably leathery in the autumn, and then acquire a purplish cast and are shining. They fall off about the same time as those of C. punctata and pyrifolia.

The plant from which our drawing was taken stands in the Arboretum of the Horticultural Society.





* MAXILLÁRIA cristáta.

Crested Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ. (Introduction to the Natural System of Botany, p. 262.)

MAXILLARIA.—Suprà, vol. 11. fol. 897.

M. cristata; pseudobulbis ovatis sulcatis monophyllis, foliis oblongo-lanceolatis plicatis, scapo pendulo bifloro squamis laxiusculis vaginato, floribus explanatis, sepalis petalisque lanceolatis acutis æqualibus, labello multo minore tripartito carnoso: laciniis lateralibus falcatis intermedià rotundatà cristato-fimbriatà utrinque unidentatà, ungue subcristato disco bidentato.

Sepala 1¾ unciam longa, alba, sanguineo interruptè striata et fasciata. Petala aqualia et conformia, apice sanguinea basi maculata dorso alba. Labellum purpureum, unque viridi cristà dentibusque albis; crista laciniæ intermediæ fimbriata pilis submoniliformibus: unguis e cirrhulis 4-6 rectis submoniliformibus constans; dentes disci compressi divaricati margine crenati posteriore duplò majore. Columna basi viridis, apice lutea, et utrinque subalata, rostello longissimo subulato. Caudicula polliniorum longissima, glandulà parvà subtriangulari.

For the opportunity of publishing this remarkably beautiful epiphyte, we are obliged to Mr. Knight, of the King's Road Nursery, with whom it flowered in the stove in July last.

It is a native of Trinidad, growing on old decayed branches of trees near the Mud Lake. We have seen a drawing of it taken on the spot, and it was in no degree superior in beauty to the present specimen.

The lip is a most curious organ. It is of a firm fleshy texture, and is deeply divided into three parts; of these the

^{*} See folio 1206.

two lateral ones are falcate and smooth, while the middle one is rounded, has a strong tooth on each side, and is bordered by a deep white fringe of necklace-shaped hairs; then the short stalk of the lip has four or more such hairs growing straight from its border, and the disk is furnished with a large white two-lobed flat tooth, the divisions of which diverge from each other.

The striping, banding, and painting of the delicate white flowers with rich crimson, produces a very rich and striking effect.





1812

* GARDOQUÍA Gilliésii.

The Gillies Gardoquia.

DIDYNAMIA GYMNOSPERMIA.

Nat. ord. Labiaceæ. (Introduction to the Natural System of Bolany, p. 239.)

GARDOQUIA.—Suprà, vol. 21. fol. 1747.

- G. Gilliesii; suffruticosa, ramis divaricatis pubescentibus, foliis oblongo-linearibus cuneatisve obtusis integerrimis basi angustatis utrinque viridibus planis, floralibus conformibus bracteisque calyce subbrevioribus, verticillastris paucis multifloris laxiusculis irregularibus, calycibus elongatis erectis, dentibus lanceolato-subulatis subæqualibus, fauce intùs nudâ. Bentham Gen. § Sp. Labiat. p. 403.
- G. Gilliesii. Graham in Edinb. Phil. Journ. 1831, Sept. G. chilensis. Bentham in Hooker & Arn. Beech. Voy. 58.

A neat little half-shrubby herbaceous plant, growing not more than 6 or 8 inches high, flowering from June to September in the open border, and readily multiplied by cuttings which root freely in peat and sand. It requires a little protection in winter.

It appears to be a common Chilian plant, for it occurs in almost every collection that has yet reached England from the neighbourhood of Valparaiso.

Our drawing was made in the Garden of the Horticultural Society.

Although this is far less showy than G. *Hookeri*, figured at fol. 1747, yet as it is a hardier plant it will be to many the more interesting of the two.

Our figure represents the analysis of the parts of fructification: 1. is a magnified entire flower; 2. is a calyx; 3. a corolla split open; and, 4. one of the anthers with a part of the filament.

^{*} See folio 1747.







* DAUBÉNYA aúrea.

Golden Daubenya.

HEXANDRIA MONOGYNIA.

Nat. ord. Asphodelaceæ. (Introduction to the Natural System of Botany, p. 273.)

DAUBENYA.—Inflorescentia umbellata, sessilis, epigæa. Perianthium tubulosum, ovario arcte appressum, limbo bilabiato, labio superiore nano tridentato, inferiore majore tripartito: in floribus radii maximo, disci depauperato. Stamina 6 inæqualia basi laciniarum adnata, declinata, in floribus disci sæpè submonadelpha. Ovarium elongatum, subtriangulare angulis rotundatis, in stylo angustatum; 3-loculare, loculis polyspermis apice vacuis. Stigma simplex.—
Bulbi capenses habitu omnino Massoniæ.

D. aurea.

Massonia lutea. Hort.

Folia 2, oblonga, carnosa, sulcata, prostrata, umbellam sessilem multifloram e sinu suo emittentia. Flores lutei, densè aggregati; radii labio
exteriore (inferiore) 3-partito; laciniis obovatis rotundatis lateralibus brevioribus; disci laciniis omnibus angustis labii majoris acutis paulò elongatis.
Stamina 6, basi laciniarum adnata, declinata, laciniæ inferiori intermediæ
oppositum cum eå altiùs connatum. Antheræ dorso affixæ. Ovarium laciniis
nullis inter loculos. Ovula rotunda funiculo brevi placentæ adnata.

A greenhouse bulb, native of the Cape of Good Hope, whence it was obtained by Messrs. Young of Epsom, under the name of *Massonia lutea*. It flowers in June, and is very pretty as well as singular, so long as its blossoms remain expanded, which is for about three weeks; afterwards its flaccid green leaves have little to attract attention.

No trace of this plant is to be found in books, so that it is probably some recent discovery made in the interior of the Cape Colony. From Massonia, with which it remark-

^{*} We name this new and curious genus after Dr Charles Daubeny, Professor of Botany at Oxford, whose interesting researches in Vegetable Chemistry have materially conduced to improve our knowledge of the physiology of plants.

ably agrees in habit, it differs essentially in its tubular not campanulate, very irregular, perianth, and in the absence of the honey-pores which form so remarkable a part of the character of Massonia. With the fruit we are unacquainted.

Fig. 1. represents a flower of the ray with the larger lip; fig. 2. is one of the flowers of the disk, in which both lips are very small and imperfect; fig. 3. is a vertical section of the ovary, with the empty upper portion of the cells; fig. 4. is a transverse section of the ovary, shewing how closely it is invested by the tube of the perianth; this takes place to such a degree as to give the ovary the appearance of being inferior.





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* ELICHRYSUM bicolor.

Two-coloured Elichrysum.

SYNGENESIA POLYANDRIA.

Nat. ord. Asteraceæ. (Compositæ.) Introduction to the Natural System of Botany, p. 197.)

ELICHRYSUM.—Suprà, vol. 1. fol. 21.

E. bicolor; annuum; foliis lineari-laneeolatis acuminatis basi obtusis scabrociliatis, superioribus subulatis, caule glabro ramoso ramulis monocephalis esquamatis, bracteis involucri fulvis aureisque acutis.

Caulis 2-pedalis, sulcatus, fastigio ramoso. Folia basi aliquando subcordata, margine scabra, supra scabriuscula. Capitula facie omnia E. bracteati.

A beautiful new hardy annual introduced by Mr. Low of the Clapton Nursery. In appearance it resembles the now common *E. bracteatum*, but is much handsomer.

It is a native of Van Diemen's Land, whence our excellent correspondent Mr. Gunn has sent beautiful specimens (No. 111), agreeing in all respects with the cultivated plant.

It is one of the prettiest new species of the season that has just past by.

^{*} This is an old Greek name, meaning a golden spiral, and consequently should be written Helichrysum. It is supposed to have been the plant now called Guaphalium Stæchas.







1815

* MACRADÉNIA triándra.

Triandrous Long-gland.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidace.e, § Vande.e, Lindl. (Introduction to the Natural System of Botany, p. 262.)

MACRADENIA.—Suprà, vol. 8. fol. 612.

M. triandra; foliis coriaceis lineari-oblongis acuminatis, racemo prostreto lahello in medio trilamellato, clinandrio serrato antheris duabus sterilibus.

Pseudobulbi cylindracei paulo attenuati. Folia plurivenia. Racent foliis multò breviores. Sepala et petala intus sanguinea herbaceo limbate Labelli lamellæ rotundatæ, costæformes, antrorsùm crassiores. Anthersteriles ovales, integræ, sanguineo marginatæ.

The Macradenia lutescens of this work (folio 612) we have never seen; but as it was described by Dr. Brown we have no difficulty in deciding, upon the evidence that the description affords, that it is specifically different from this.

No notice is taken by Dr. Brown of the existence of any lamellæ in the middle of the lip, nor of the abortive anthers which are always present; besides which the clinandrium here is regularly and strongly serrated, the leaves much narrower, and the raceme pendulous or prostrate instead of erect.

A native of Surinam, whence it was brought by Mr. Lance. It flowered in the possession of the Horticultural Society in May last. A strong damp stove heat is required to keep it in health.

^{*} So named in allusion to the long caudicula of the pollen masses, fig. 5. from $\mu\alpha\kappa\rho\rho_0$ long, and $\alpha\delta\eta\nu$ a gland.







* COCCOLÓBA virens.

Green Sea-side Grape.

OCTANDRIA TRIGYNIA.

Nat. ord. Polygonacex. (Introduction to the Natural System of Botany, p. 221.)

COCCOLOBA, L. Calyx 5-partitus, semi-inferus, laciniis imbricatis; in fructu incrassatus baccans. Stamina 7-10 serie simplici fauce inserta, filamentis basi in urceolum brevissimum coalitis. Ovarium semi-superum, trigynum; stigmatibus spathulatis nunc lobulatis. Achenium basi lobatum, osscum, calyce baccato tectum.—Frutices arboresve minores, occidentales. Flores racemosi. Fructus subacidi, edules.

C. virens; foliis ovato-lanceolatis obtusis basi in petiolum angustatis, racemis nutantibus, floribus decandris.

Folia omninò depilata, ovato-lanceolata, semper basi angustata nec ullo modo basi obtusa vel cordata; omnia conformia. Racemi virides, nutantes, foliis minoribus æquales.

The species of Coccoloba are so ill defined in books that it is by no means easy in the absence of fruit to determine them. This in some respects resembles C. obtusifolia of Jacquin, in others C. microstachya of Willdenow. From the former it differs in the form of its leaves, from the latter in their size and proportion to the racemes.

A hothouse plant, communicated from Wormleybury by Sir Abraham Hume, with whom it flowered in August 1833. It was called C. excoriata, which is a very different plant.

We are unacquainted with its native country, but presume it to be the West Indies.

^{*} From KOKKOG a fruit (in this case seed) and Aoffog a lobe, in allusion to the lobed seeds.







- 1 40 - 100 mills = 1 055.

1817

* ÓXALIS Pióttæ.

Piotta's Oxalis.

DECANDRIA PENTAGYNIA.

Nat. ord. Oxalidaceæ. (Introduction to the Natural System of Botany, p. 140.)

OXALIS.—Suprà, vol. 15. fol. 1249.

O. Piottæ; acaulis, petiolo planiusculo, foliolis 3 obcordatis glabris, scapo pubescente unifloro foliis longiore, sepalis integris, stylis longissimis, stigmatibus plumosis.

O. Piottæ. Colla Hort. Rip. p. 98. t. 1.

A truly beautiful little half hardy, or frame perennial, flowering most copiously during the months of July and August. A little tuft does not indeed produce much appearance, but a pot filled with its dense green leaves and covered with the large salmon coloured flowers is a lovely object.

Said to be a native of the Cape of Good Hope. Our specimens were obligingly communicated by Mrs. Marryat, to whom they were sent by Mrs. Palliser. That lady obtained them both from Professor Savi of Pisa and from the direction of other Italian Botanic Gardens.

We believe the plant is at present in the possession of no one in this country except Mrs. Marryat, and those of her friends to whom she has given it.

The species seems nearly allied to O. compressa.

^{*} See folio 1249.







* GALATÉLLA punctáta.

Dotted Galatella.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Nat. ord. Asterace. (Composite.) (Introduction to the Natural System of Botany, p. 197.)

GALATELLA, Cassini. Capitulum radiatum; radio uniseriali, ligulis femineis abortivis; disci flosculis hermaphroditis fertilibus tubulosis; stigmatibus apice spathulatis obtusis. Involucrum disco brevius; foliolis pluriserialibus imbricatis inappendiculatis; interioribus membranaceis exterioribus sæpè trinerviis. Receptuculum alveolatum, marginibus alveolorum paleaceo-laceris. Pappus simplex, pluriserialis, radiis filiformibus rigidis serrulato-scabris. Achenia densè hirsuta v. strigoso-setacea. Necs Genera et Sp. Asterearum, p. 158. (terminis mutatis.)

G. punctatu; foliis lineari-lanceolatis acuminatis integerrimis trinervibus punctatis seabris, ramulorum linearibus, caule apice corymboso ramis clongatis paucifloris contractis, involucris brevibus turbinatis, radio longo. Nees l. c. Aster punctatus. W. & Kit. Pl. Hung. 2.113. t. 109.

Galatella intermedia. Cass. in dict. des sc. nat. xviii. p. 58.

Aster desertorum. Fisch. ined.

A hardy herbaceous plant, native of salt marshes in Hungary, Podolia, and elsewhere in the east of Europe. It also occurs in Siberia. In this country it flowers in July and August, growing to the height of about two feet, and forming a thick compact bush.

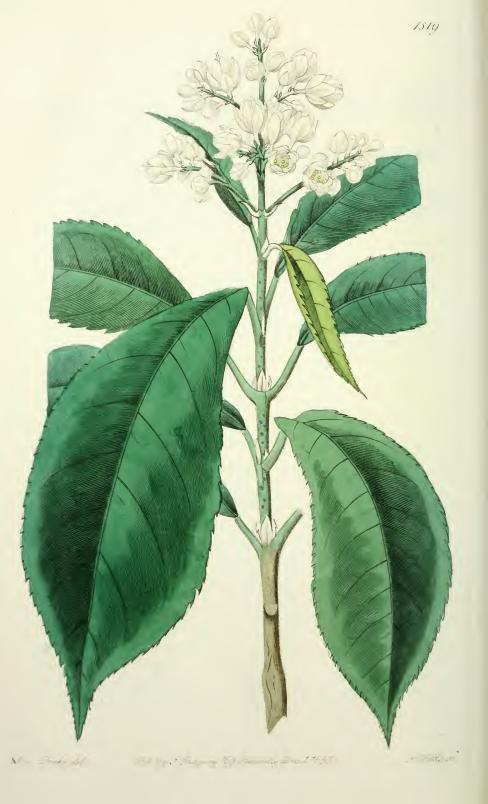
We greatly doubt whether it is really a distinct species from G. hyssopifolia and acris, or they from each other, so very difficult is it to distinguish them with absolute certainty when one has a long series of specimens under examination. From the former it may, however, be generally known by its compact inflorescence, and larger flower heads, which are

quite regularly corymbose, instead of being of different heights as in hyssopifolia; its leaves too are more uniformly three-ribbed.

In G. acris the leaves are pretty uniformly one-ribbed, and the inflorescence much smaller and more contracted.

All the species of this genus are well adapted for borders of shrubberies, and for places where shade-loving plants alone will grow.





* OCHRÁNTHE arguta.

Fine-toothed Palebloom.

PENTANDRIA TRIGYNIA.

Nat. ord. Hypericaceæ Anomalæ.

OCHRANTHE. Calyx membranaccus, 5-phyllus, imbricatus, corolla pentapetalæ simillimus. Stamina 5 hypogyna. Discus urceolatus pentagonus. Carpella 3, basi juncta, stylis disjunctis. Ovula cuique carpello 6, placentæ centrali affixa.—Folia opposita, serrata. Stipulæ interpetiolares serratæ. Flores terminales, pallidi.

Ochranthe arguta.

Caulis fruticosus, glaber, adultus cinereus, junior viridis cinereo maculatus. Folia opposita, glabra, petiolata, obovato-lanceolata, acuminata, serrata, basi integra. Stipulæ intrapetiolares, ovatæ, serrulatæ, pallidæ. Thyrsus terminalis, congestus, pauciflorus. Flores inodori, albidi, demum flavescentes. Pedicelli basi 1-, medio 2-bracteati, glabri. Calyx erecto-patens, irregularis, 5-phyllus; sepalis concavis, obtusis, inæqualibus, exterioribus corolla brevioribus, margine subciliatis, æstivatione imbricatis 3. Petala 5, hypogyna, subconvoluta, rarò aliquot patentia, unguiculata, oblonga, obtusa, versus medium 3-venia. Stamina 5, hypogyna, erecta, rigida, pistilli longitudine, petalis alterna; antheræ medio affixæ, introrsæ, erectæ, biloculares, longitudinaliter dehiscentes; pollen rotundo-triquetrum, angulis (inflatis?) globosis pellucidis, nunc subrotundum angulis nullis. Discus cyathiformis, pentagonus, carnosus, angulis planatis. Ovarium superum, ovatum, obtusè trigonum, stylis 3 subulatis erectis, versus basin pilis raris patentibus; 3-loculare, ovulis circiter 6 in utroque loculo, placentæ versus apicem axeos appensis.

A native of China, and consequently a Greenhouse plant. It flowered in the Garden of the Horticultural Society so long since as March 1826; but shortly after died, and has never again made its appearance. We have kept the drawing ever since in our portfolio, in the hope of the species being

^{*} From ωχρός pale, and ανθος a flower.

again discovered, but we now find it necessary to publish some account of the plant.

The fruit being unknown, we are unable to obtain even an approximation to its true station in the system. In some respects it resembles Cunoniaceæ, especially in its remarkable stipulation, and apocarpous many-seeded pistil, combined with opposite leaves; but it differs in having only five hypogynous stamens, three instead of two carpels, and a remarkably imbricated calyx.

Eucryphia and Carpodontos among Hypericaceæ are polyandrous and have no stipules, besides other points of discrepancy.

Hugoniaceæ have alternate leaves, a different habit, and a larger number of stamens.

Anisadenia, which seems to be a shrubby Elatinaceous plant, has monadelphous stamens, and no hypogynous cup, &c. Its leaves are also alternate without stipules.

In all probability Ochranthe forms a part of some unknown order, the station of which will be in the Calycose group of polypetalous Dicotyledons, either in the Cistal or Guttal alliance. (See Key to Structural, Physiological and Systematic Botany, p. 51.)





* RHODODÉNDRON pulchérrimum.

The lovely Rhododendron.

DECANDRIA MONOGYNIA.

Nat. ord. Ericacee. (Introduction to the Natural System of Botany, p. 182.)

RHODODENDRON.—Suprà, vol. 1. fot. 37.

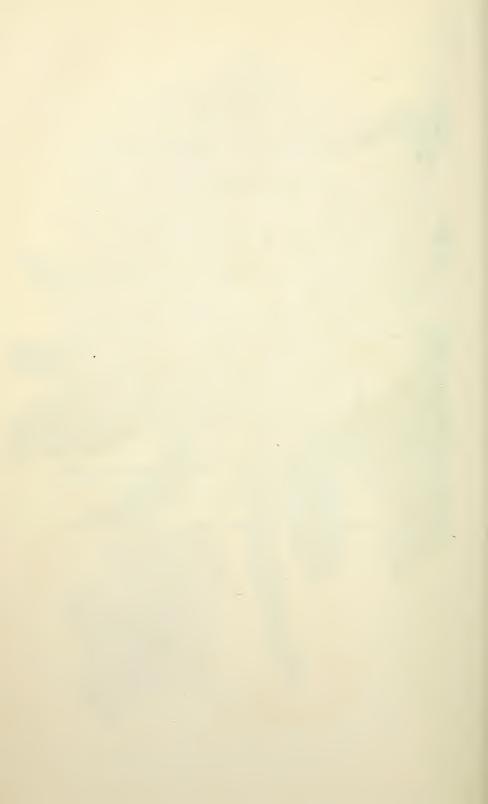
GARDEN VARIETY.

A most beautiful plant obtained by Mr. Waterer of Knaphill between R. arboreum and caucasicum. It is of rather delicate appearance, but we are informed that it is quite hardy, and an abundant flowerer. Our drawing was made in March last.

Fig. 1 is a kind called Rhododendron Nobleanum, which is very much like the other in all respects, except that its flowers are of a deep and brilliant rose colour.

Both are among the handsomest hardy shrubs in cultivation.

^{*} See folio 1240.







* EULÓPHIA lúrida.

Lurid Eulophia.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidacex, § Vandex, Lindl. (Introduction to the Natural System of Botany, p. 262.)

EULOPHIA.—Suprà, vol. 17. fol. 1433.

E. lurida; foliis (lineari-) lanceolatis scapo ramoso multò brevioribus, bracteis minimis subulatis, sepalis lineari-spatulatis obtusis, petalis paulò latioribus, labelli tripartiti basi callosi lobis lateralibus obtusis recurvis: intermedio obcordato, calcare cylindraceo inflexo obtuso. Lindl. gen. et sp. Orch. p. 182.

One of the easiest of all stove Orchideous plants to cultivate, growing upon a damp wall, or a rough stone, or under almost any kind of condition, provided the air be hot and damp, and uniform. It then flowers profusely at intervals throughout the whole year. Our drawing was made in the noble collection of the Messrs. Loddiges in January last.

A native of Sierra Leone, whence great quantities are occasionally brought. It appears to be extremely common upon the trunks of trees in some parts of that colony.

^{*} See folio 1433.









* COSMÉLIA rúbra.

Red Cosmelia.

PENTANDRIA MONOGYNIA.

Nat. ord. EPACRIDACEÆ.

COSMELIA. Calyx foliaceus. Corolla tubulosa. Stamina epipetala; antheræ apicibus ciliatis filamentorum adnatæ. Squamulæ 5, hypogynæ. Capsula placentis columnæ centrali adnatis.——Frutæ paludosus, erectus, ramosus, ramis dum denudatis non cicatrisatis. Folia basibus cucullatis semivaginantibus. Flores ramos laterales breves terminantes, solitarii, cernui. Calyx foliis minoribus imbricatus. Corolla ruberrima. Stamina inclusa, autheris basi solutis. Placentæ utraque extremitate liberæ. Brown prodr. 553.

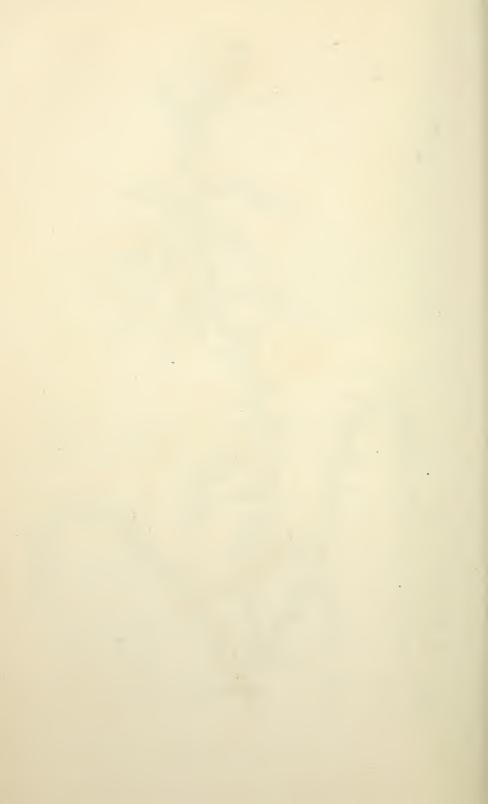
C. rubra. Brown l. c.

According to Dr. Brown this is a marsh plant, found upon the South Coast of New Holland, and remarkable for its leaves, although so thick and rigid, not leaving conspicuous scars upon the branches when they fall off.

In this country it is a very pretty greenhouse plant with the habit of an Epacris. Our drawing was made in Messrs. Loddiges collection in May last.

The dissected parts of the flower in the accompanying plate afford a good illustration of the Natural order Epacridaceæ, which are only known from true Ericaceæ by their anthers having single cells opening by a pore. 1. Is the top of a corolla cut open, with the stamens sticking to it; 2. an anther with a portion of the upper end of a filament; 3. a pistil, with the five hypogynous scales.

^{*} Apparently from κοσμεω to ornament, in allusion to its beauty.







* LASTHENIA califórnica.

Downy Lasthenia.

SYNGENESIA POLYGAMIA SUPERFLUA.

Nat. ord. ASTERACEÆ (COMPOSITÆ). LASTHENIA.—Suprà, vol. 21. fol. 1780.

L. californica; subpubescens; foliis integerrimis, capitulis basi umbonatis.
Supra l. c.
L. californica, De Cand. prodr. ined.

This species differs from the one already published in the present work in little except its smaller size, and differently formed flower heads, which are impressed at the base with a cavity for the peduncle, and like the peduncles themselves are slightly downy.

It is an annual plant, flowering for about six weeks at different periods of the year, according to the season at which its seeds are sown.

Professor De Candolle, in a manuscript list of the genera of Compositæ, which we have just received from him, includes it in his first series Tubulifloræ, fourth tribe Senecionideæ, fifth sub-tribe Helenieæ, first division Gaillardieæ, second sub-division Euhelenieæ, along with Cephalophora and Helenium, both of which are known in our gardens. We observe that Professor De Candolle attributes the genus to Cassini, but we have not succeeded in discovering it in any of the writings of that most unmethodical of Botanists.







* ARISTOLOCHÍA fœtens.

Stinking Birthwort.

GYNANDRIA HEXANDRIA.

Nat. ord. Aristolochiaceæ.

ARISTOLOCHIA.—Suprà, vol. 8. fol. 689.

A. fætens; foliis lato-cordatis acutis, caule volubili, pedunculis solitariis, bracteâ perfoliatâ, limbo calycis maximo integro cordato labio longissimè caudato, tubo extus glabro.

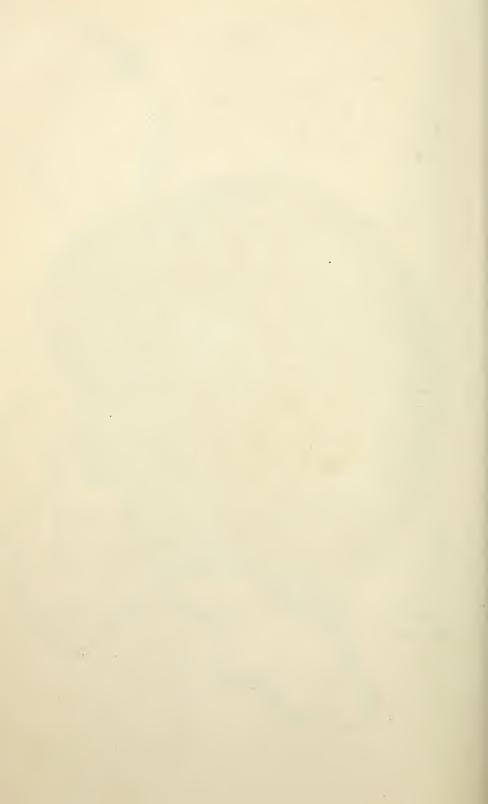
Nauseosa, fætida, demum semiputrida ramis scandit longis volubilibus glabris. Folia cordata sinu aperto, integerrima, subrotunda, acuminata, subtus levissimè pubescentia, glaucescentia. Bracteæ solitariæ, orbiculatæ, perfoliatæ. Flores maximi, tubo extus glabro, basi inflato, sursum angustato costato arcuato, limbo subrotundo cordato basi clauso apice in appendicem longum linearem subspiralem acuminatum producto, lutco purpureoque livido variegato maculato et punctato.

A native of the West Indies, whence it has been obtained by Mrs. Marryat, in whose stove at Wimbledon it flowered in June last. Like all the other hothouse species it strikes readily from cuttings.

It is chiefly remarkable for the large size, and singular colour of its flowers, which are beautifully variegated with purple and dirty yellow; they have a most disagreeable disgusting smell, which will prevent the plant from becoming a favourite.

Nearly allied to A. grandiflora, from which it is distinguished by the smooth tube of its calyx, the colour of the same part, &c. &c.

^{*} See folio 1399.







* PLEUROTHÁLLIS pícta.

Painted Pleurothallis.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Malaxideæ.

PLEUROTHALLIS.—Suprà, vol. 9. fol. 759.

P. picta; folio spathulato marginato retuso racemis laxis duplò breviore, bracteis minimis, sepalis acuminatis lateralibus apice tant\u00fcm sejunctis, petalis linearilanceolatis acutis, labello lineari obtuso carnoso supra 1-sulcato. Supra fol. 1797.

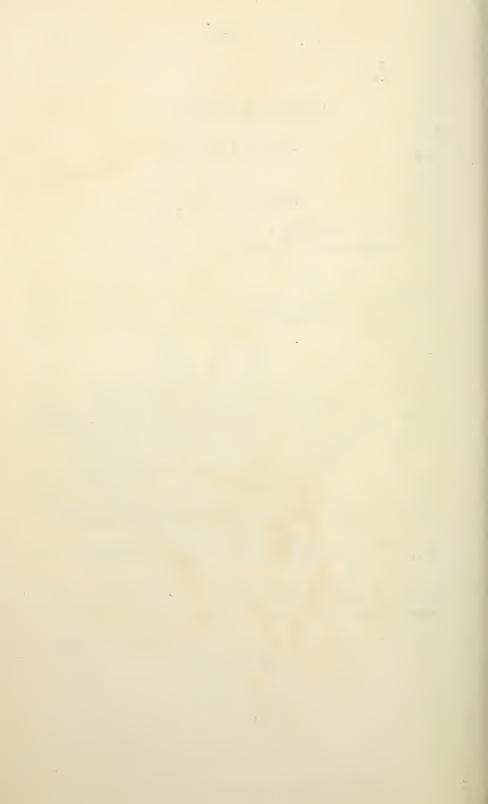
Very near the P. Grobyi already figured in this work (fol. 1797), from which it principally differs in its spathula-shaped retuse leaves, and in the narrower form of all the parts of the flower; as will be seen by comparing the dissections in the two plates.

This also is a native of Demerara, and was sent us by Mr. Loddiges first in October 1834, and next in March 1835, when our drawing was made. It is a graceful pretty species, and well deserves an attentive examination.

Its tufts are rapidly formed under good management, but it seems to require the close atmosphere of a bell-glass.

Fig. 1. is a view of the column, petals, and lip. 2. The column by itself. 3. The upper side of the lip. 4. The pollen mass in situ. 5. The same separated from each other.

^{*} See folio 1298.







* HIBISCUS Rosa sinensis.

Single-flowered Chinese Rose Mallow.

MONADELPHIA POLYANDRIA.

Nat. ord. Malvaceæ. HIBISCUS—Suprà, vol. 1. fol. 29.

§ IV. KETMIA. Carpella seu capsulæ loculamenta polysperma. Semina glabra. Corollæ expansæ. Involucella 5-7-phylla. Calyx 5-lobus non longitudinaliter ruptus D. C. prodr. 1. 448.

H. Rosa-sinensis; caule inermi arboreo, foliis ovatis acuminatis glabris basi integerrimis apice grossè dentatis subincisis, pedicellis folii longitudine, involucello 7-phyllo. D. C. l. c.

H. Rosa Sinensis. Linn. sp. pl. 977. Lour. ft. cochinch. 2, 419. Cav. diss. 3, 1, 69. f. 2.

Flos Festalis. Rumph. Amb. book 6. chap. 11. t. 8.

The double varieties of this species, crimson, yellow, buff, and even white, are not uncommon in collections, but the single state which is now represented, although much handsomer, is comparatively rare.

Instead of a crowd of ragged, unequal, ill-arranged petals, destitute of all symmetry, occupying the centre of the flower, we have a long graceful curved crimson tube, terminated by a brush of bright yellow anthers, which surround five little crimson velvet cushions of stigmas.

It is easily propagated by cuttings, but requires a good stove to flower in perfection. Our drawing was made in that of the Horticultural Society in September 1834.

According to Loureiro this species is spontaneous both in China and Cochinchina; where it is employed for many

^{*} See folio 1 163.

purposes as an emollient. The flowers tinge spirits of wine red, or by the addition of a little alum a beautiful violet. Shoes or other similar things are blackened, by rubbing the flowers upon them. In Cochinchina the plant is so common that garden hedges are often made of it.

Rumf says that in Amboyna it was in his days employed as a common ornament on occasions of festivity and even at funerals. From its constant use for blacking shoes it had acquired the barbarous Portuguese name of Fula Sapato.





. . . who tel.

* PIMELÉA ligustrina.

Privet-leaved Pimelea.

DIANDRIA MONOGYNIA.

Nat. ord. Thymelacer.

PIMELEA.—Suprà, vol. 15. fol. 1268.

1. Folia opposita. Capitulum terminale. Involucrum foliis rameis dissimile. Br. prodr. 359.

P. ligustrina; involucris tetraphyllis, foliolis ovatis extus venosis intus pubescentibus, perianthiis sericeis, receptaculis fructiferis ovatis pube brevissima, foliis ovalibus oblongo-lanceolatisve venosis. Br. l. c.

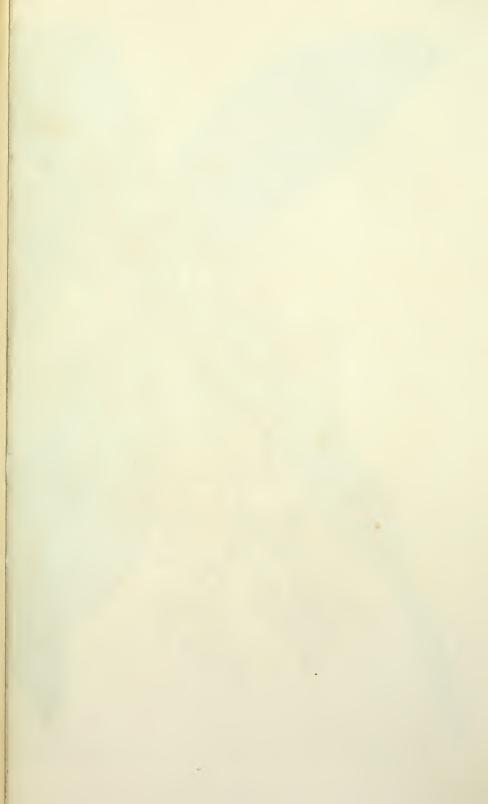
P. ligustrina. Lab. Fl. Nov. Holl. 1. p. 9. t. 3.

A neat species of the extensive genus Pimelea, found from Van Diemen's Land to Port Jackson, and growing in its native places as much as ten feet high. We have specimens from Mr. Gunn of Launceston, and others.

It is a hardy greenhouse plant, readily multiplied by cuttings. It only requires good ventilation during winter, so as to prevent its being destroyed by damp. Our drawing was made in Mr. Lowe's Nursery in March 1834.

We are not aware of the particular part of the island of Van Diemen in which this shrub occurs; but if it is from the south side it will probably prove hardy in the southern parts of England.

^{*} See folio 1268.









* DENDRÓBIUM densiflórum.

Dense-flowered Dendrobium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Malaxideæ.

DENDROBIUM.—Suprà, vol. 7 fol. 548.

D. densiflorum; caulibus articulatis clavatis pendulis apice foliosis, foliis oblongis acutis nervosis, racemis lateralibus multifloris foliis longioribus; junioribus strobiliformibus, bracteis oblongis plicatis recurvis pedicellis longioribus, sepalis patentissimis ovatis obtusis, petalis conformibus majoribus, labello majore rhomboideo unguiculato serrulato retuso. Lindl. Gen. & Sp. Orch. p. 90. Wall. Pl. as. rar. no. 40.

Planta pendula, lævis, cæspitosa, arborum parasitica, pedalis-2-pedalis. Radix constans fibris numerosis, fasciculatis, teretibus, indivisis. Caules plures, rigidi, cylindraceo-clavati, lucidi, ætate flavicantes, maxima parte nudi, sulcis aliquot profundis totidemque angulis obtusissimis notati, vestigiis vaqinarum remotis annulati, extrorsum digitum crassi, apice foliosi. Folia valde approximata, patentia, alterna, ovato-oblonga, acuta, 5-pollicaria, firma, subcarnosa, lucida, plana, nervosa, basi contracta obsoletissimè petiolatá abientia in vaginas breves, adpressas, deciduas. Racemus magnus, solitarius, laxè pendulus, versus apicem caulis infra folia lateralis, pedunculatus, 6-8-pollicaris, ovato-oblongus, obtusus, multiflorus; novellus, longè ante expansionem, sessilis, ovatus, strobiliformis, 2-pollicaris, valde regulariter imbricatus bracteis adpressis, planis, alternantibus. Pedunculus crassus, cylindricus, 2-3-pollicaris, bracteis sparsis, oblongis, recurvis, nervosis, membranaceis, ferè pollicaribus, persistentibus. Flores valdè numerosi, majusculi, flavi, approximati, undique sparsi, patentissimi, insidentes pedicellis teretibus, pollicaribus, suffultis bracteà magna, obovata, nervosa, persistente. Sepala oblonga, obtusa, semipollicaria; lateralia parum majora, basique dilatatā infra basin columnæ in calcar brevissimum, subcylindricum, obtusum connata, uti petala ovata, subæquantia, patentissima. Lahellum planum, patens, retusum, ciliato-denticulatum, suprà pubescens, basi desinens in unguem brevem, canaliculatum. Columna brevis, conica, crassa, basi leviter producta. Anthera ovata. Wallich.

"This lovely Orchidea comes so near to Roxburgh's Dendrobium clavatum (Hort. Beng. p. 63), that I should consider them as identical, if he had not ascribed bulbs to his plant, of which ours is entirely destitute. In the Calcutta garden the two plants maintain that character, although in other respects they are alike. It is possible that under particular circumstances, the bulbs or pseudo-bulbs may become elongated into clavate stems, and if so the Silhet plant would be the same species with ours from Nipal."

The above we borrow from Dr. Wallich's splendid Plantæ Asiaticæ.

Beautiful as is the specimen of this plant, represented in the accompanying figure, it is still inferior to what is produced in India, so that cultivators have still a point to gain in respect to this charming species. Our drawing was made in the stove of Messrs. Loddiges in May last.

Since the last addition to the published species of Dendrobium, we have received from Mr. Allan Cunningham specimens of a most remarkable new kind, with the following memorandum.

"Dendrobium cassythoides; aphyllum, caule glabro stolonifero, floribus racemosis, racemis (stolonibus oppositis) subtribrachiatis, bracteis lanceolato-ovatis appressis, labello convoluto indiviso apice incurvo crispato, [callo lineari in medio et altero ovato acuminato sub apice."]

"A leasless stoloniferous plant, with tribrachiate racemes of flowers, of which the perianths are of a brownish or golden yellow colour, and the labellum white, and elegantly pencilled within, as in D. *Pierardi*."

- "Found growing from the crevices of sandstone rocks, on the eastern side of Sydney Cove, Port Jackson, where it was observed in flower in October 1834."—R. C.
- "The above is extracted from a letter from my brother, Mr. Richard Cunningham, dated August 2, 1834. He adds,
- "I send you in a bottle a Dendrobium, which, not finding noticed in either printed or manuscript enumerations in my possession I have called Cassythoides, from the *primâ facie* resemblance it has to the genus Cassytha, not only in its leafless character and short racemes of flowers, but in its peculiar chocolate bronze or japanned papulose stems—it may be found, that it also resembles it in its climbing propensities."

It is not a little remarkable that so highly curious a plant as this should so long have been overlooked, although a native of a locality which, as Mr. Allan Cunningham remarks, has doubtless been traversed by Botanists of many countries in Europe, who have visited Port Jackson in ships of discovery since the Colony was founded in January 1788, viz., French, Spanish, German, Swedish, Russian, &c., besides many of our own countrymen.



GENERAL ALPHABETICAL INDEX

TO

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